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ABSTRACT

The conference reported here was designed to encourage practitioners and other educational decision makers to improve, expand, and/or install programs of education/work in postsecondary institutions of Colorado. The objectives, program, and conference proceedings from each of four sessions are presented. Session one, an overview, consists of several presentations and a task groups caucus. Some representative titles of the presentations are "Job Development and Placement Services", "Cooperative Education Programs", and "Cooperative Vocational Education Programs in Colorado". Session two involves two presentations on postsecondary education/work programs (one concerning the conceptual framework and the other on practices and promises), a task groups caucus, and a report of the task groups leaders on how to plan, design, implement, and maintain effective programs and services of education/work in Colorado. The third session covers seven symposium presentations on perceptions, expectations, and recommendations for Colorado postsecondary programs of education/work followed by a forum between the symposium presenters and a seven-member panel. Session four includes two presentations with the following titles: "Career Assistance and Placement Services--A Report from Triton College" and "Education/Work--Recommendations/Strategies/Challenges for Postsecondary Institutions in Colorado." The appendix includes two additional papers and the participants' evaluation form and their responses. (EM)

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ED151576

Final Proceedings

Project No. 498AH60261
Grant No. G007603722

POSTSECONDARY CONFERENCE ON EDUCATION/WORK

Graduate Vocational Teacher Education

University of Northern Colorado

Greeley, Colorado

September 30, 1977

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
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CE 015 240

COLORADO POSTSECONDARY CONFERENCE ON

EDUCATION/WORK

PROCEEDINGS

January 25-28, 1977

Holiday Inn
609 Eighth Avenue
Greeley, CO 80631

Sponsored by:

Graduate Vocational Teacher Education
College of Education
University of Northern Colorado
Greeley, Colorado

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A Project Conducted Under
Part C of the Vocational Education Act
of 1963 as amended

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FOREWORD

As part of its interest in and support of studies in vocational education, The College of Education continues to pursue and engage in research and development activities that contribute to the betterment of vocational teacher education. The Conference on Education/Work was designed to encourage practitioners and other educational decision makers to improve, expand, and/or install programs of education/work in postsecondary institutions of Colorado.

The Conference involved ninety-six participants and presenters. Their involvement and commitment should lead to improved, expanded, and new programs of education/work. We would like to thank the participants of Colorado postsecondary institutions and those who represented business/industry, labor, and governmental agencies for their invaluable contribution.

Dr. Louise J. Keller and Dr. Lois Bennett, Professors of Graduate Vocational Teacher Education at UNC are to be commended for their efforts to make the conference function effectively. The university extends special thanks to the following graduate students who have worked as a team the past year on the various adult/postsecondary thrusts: Charlene R. Collins, Edna E. Peart, Anita T. Salazar, Larry S. Warner, and Michael Victor Weerts.

Bruce W. Broderius, Dean
College of Education
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Robert F. Barnes, Director
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The Conference on Postsecondary Education/Work was a project that was guided after the original proposal by a State Steering Council. The staff of Graduate Vocational Teacher Education and the Project Research Associates wish to commend the following individuals who served on the State Steering Council for their efforts as conference planners, participants, as well as presenters or task group leaders.

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State Board for Community Colleges and Occupational Education

Mr. John Brennan, Director of Adult Education
State Department of Education

Dr. Don Carson, Resource Development Coordinator
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State Board for Community Colleges and Occupational Education

Mr. Larry Selland, EPDA Fellow
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Mr. Marion Shaw, Vocational Job Development and Placement Specialist
Mesa College

Mrs. Lucy Stromquist, Coordinator High School Completion Program
Longmont Public Schools

PREFACE

Graduate Vocational Teacher Education within the College of Education at the University of Northern Colorado was awarded an USOE Project under Public Law 90-576, Part C, Section 131(a)--Research and Training--of the Vocational Education Act of 1963 as amended. The project entitled Adult Vocational Education Research and Development had three thrusts:

1. Conduct a series of literature searches related to adult education and complete a series of related studies entitled:

   * An Assessment of Characteristics of Cooperative Agreements Between Postsecondary Educational Institutions and Business, Industry, and Labor.

   * A Historical and Descriptive Study of Adult Cooperative Vocational Education Programs in Colorado Postsecondary Institutions.

   * Development of an Instrument to Assess Employer Sponsored Career Development Programs for Sub-Professional Employees.

2. Conduct a Colorado Postsecondary Adult Cooperative Vocational Education Conference at UNC, January 25-28, 1977.

3. Develop instructional modules for the improvement of content and delivery of university graduate-level introductory instruction in adult vocational education.

This report represents the final proceedings of thrust two and was distributed to all participants as well as to the Colorado State Board for Community Colleges and Occupational Education, the U.S. Office of Education, as well as submitted for inclusion in the ERIC system.

The printed proceedings are organized for the convenience of the conference participants. Each section is divided according to the conference daily schedule.

All presentations were recorded and presenters were given an opportunity to edit transcripts before inclusion in the final report. Each section begins with the daily schedule and objectives followed by presenters' remarks and/or task groups' reports.

This report is intended to facilitate the original goal of the Conference which was to expand, improve, or install programs of education/work in Colorado postsecondary institutions. We would like to thank the participants for their efforts to build upon the ideas generated at the conference.

Louise J. Keller, Project Director
Lois W. Bennett, Co-Director
Anita Salazar, Conference Co-Director

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POSTSECONDARY EDUCATION/WORK CONFERENCE

SESSION I

January 25, 1977

Objectives:

*To seek consensus on a set of working definitions for the conference.

*To assess the organization, administration, and financing patterns of Postsecondary Education/Work in Colorado.

*To delineate a set of problem areas and related needs for improving, expanding, or installing programs of Postsecondary Education/Work in Colorado.

TUESDAY MORNING

8:00	REGISTRATION	Holiday Inn, Greeley, Colorado
8:45	General Introductions Special Announcements	Dr. Louise J. Keller Conference Co-Director
9:00	Welcome to UNC and Greeley	Dr. Richard R. Bond President of the University of Northern Colorado
9:15	Session I Objectives	Ms. Anita Salazar Conference Co-Director
9:30	SESSION I--POSTSECONDARY EDUCATION/WORK IN COLORADO	
	*Working Terms and Definitions	Ms. Anita Salazar (Session I Moderator)
	*Job Development and Placement Services in Colorado	Ms. Nellie McCool State Supervisor of Vocational Guidance State Board's Division for Occupational Education
	*Cooperative Education Programs	Mr. Dick F. Gritz Dean of Community Services Northeastern Junior College Sterling, Colorado
	*Cooperative Vocational Education Programs in Colorado	Mrs. Charlene Collins Project Research Associate
	*Veterans Administration Rules and Regulations on Cooperative Education	Mr. W. P. Hardwick Veterans Services Officer Veterans Administration, Regional Office Denver Federal Center
10:30	15 minute Break	
	*Financing Vocational Programs at the Post-secondary Institutions	Mr. Paul Gaiser Planning and Coordinating Unit Manager State Board's Division of Occupational Education

	*Financing Cooperative Education in Higher Education	Dr. Norbert K. Baumgart Educational Program Specialist HEW, USOE-Region VIII Denver, Colorado
	*Financing other forms of Education/Work	Mr. Robert Rangel Dean of Student Services AIMS College Greeley, Colorado
11:50	Introduction of Leaders, Reporters, and Task Group Assignments	Dr. Louise J. Keller
12:00-1:15	LUNCH	

TUESDAY AFTERNOON

1:15	TASK GROUP CAUCUS	Task Group Leaders

Each task group leader will caucus his/her groups to (1) secure responses to the tasks listed below and (2) formulate clarification questions to be asked of Session I presenters by the task group leaders.

T--A1	Review the terms and definitions as found in the conference notebook and make recommendations as to categorizations and descriptions.
T--A2	Discuss and delineate adult learner needs for Education/Work Programs.
T--B1 and T--B2	Discuss the organization of Education/Work Programs in Colorado and delineate apparent needs.
T--C1 and T--C2	Discuss the administration of Education/Work Programs in Colorado and delineate apparent needs.
T--D1 and T--D2	Discuss the financing patterns of Education/Work Programs in Colorado and delineate apparent needs.

2:45	Break	
3:00-4:30	FORUM	Ms. Judy White, Director Project VIEW-UNC (Forum Moderator)

(The forum is between Session I Presenters and Task Group Leaders. Each task group leader will: (1) share general reactions of his/her group, (2) present clarification questions raised by a task group, and (3) through the forum session reach some agreement as to problem areas and specific needs for improving, expanding, or installing Postsecondary Programs of Education/Work in Colorado.)

4:30	CONFERENCE SUMMARY AND OPINIONS

(The following individuals will capsualize the major issues and points raised in Session I, and determine if the session's outcomes were consistent with stated objectives.)

	Dr. Jerry Kiefer AIMS Community College Greeley, Colorado	Representing Junior/Community Colleges in Colorado
	Mr. George T. Lyon Director, Vocational and Adult Education Boulder Valley Area Voc-Tech Center Boulder, Colorado	Representing Area Vocational-Technical Schools in Colorado
	Mr. Byron Graber, Principal Emily Griffith Opportunity School Denver, Colorado	Representing Local Educational Agencies in Colorado with Adult Education Programs
5:15	Announcements and Adjournment until 7:30 p.m.	Dr. Louise J. Keller

Session I
Tuesday, January 25, 1977

JOB DEVELOPMENT AND PLACEMENT SERVICES

Nellie McCool

Vocational guidance and counseling was started in 1965 by the planners and leaders of vocational programs who were then serving on the State Vocational Board. The first supervisor for vocational guidance, hired in 1965, was Mr. LeRoy Cavnar. In 1966, two Area Vocational Guidance Consultants were added to the State Board staff. Don Carson and Nellie McCool did a lot of "barnstorming" throughout the state to challenge administrators and counselors to better serve the vocational guidance and counseling needs of Colorado youth. One major effort included a statewide vocational needs assessment. These results and other factors influenced legislative action. The State Board for Community Colleges and Occupational Education was established in 1967 and included four Area Vocational Guidance Consultants to serve as outreach from the State staff.

Based upon the successes of the consultative services to the schools, colleges, and universities, the State Board provided 100 percent reimbursement to community colleges and area vocational schools who hired specialists in vocational guidance and job development/placement for outreach services provided to feeder schools in a given area. During 1968-70 the reimbursement was provided for salaries, benefits, materials, and specialists' travel.

In 1971, legislative funding was reduced, which forced a cutback in the number of consultant positions. During 1972 and 1973, there were 15 specialists funded at 75 percent reimbursement. During 1972-74, 18 specialists, reimbursed at the 66 percent level, were hired at area vocational schools, community/junior colleges, plus two of the largest school districts within Colorado. Even though legislative action dropped the reimbursement rate to 23 percent in 1975, proof of the specialists and their programs of work had been established. The home institutions, represented by local vocational education, took action to retain the vocational guidance and job development/placement specialists. Today 38 specialists are serving at twenty-three locations.

The above facts offer some historical perspectives to show how the sphere of influence should reach out into the secondary schools and the community.

What are the finance patterns and the sources of funding? There are a number of different funding sources--mainly federal, state, and local. We rely very heavily on federal funding; some of the money from community colleges, local community college system. The Colorado Vocational Act came into being and specifically included job development and placement specialists while specifically excluding Vocational Guidance Specialists in the CVA funding sources.

Placement is critical for all vocational education completers. Job development has two aspects: Human Engineering and the Client-Centered Approach in Business/Industry.

Taking the person--the client--helping them to develop or to strengthen their assets and at least know their weaknesses and limitations and what they might do about it to strengthen or to improve themselves.

Another very important aspect assumed in job development is the contacting of business people, industrialists, and taking the work of the job tasks or recombination of tasks that entry-level workers or persons with limited skills might be able to accomplish and accomplish very well. Sometimes it is a matter of negotiating with that business person or industrialist to see if he/she would allow two people, each working part time, perform those duties to get the work experience and to learn about the world of work--not as an outsider but as a participant.

In Colorado, as the state was able to keep reimbursement rates up, business people or people hired with specific job duties related to guidance and/or job development and placement, were hired. A few foresighted local directors of occupational education have provided permanent FTE for these positions. Fifty percent or more of the students enrolled are in fact vocational/technical students. Why couldn't the deans take a look at Student Personnel Services and say that at least half of these people should be effectively trained so that they, too, are doing job development and placement? These would be permanent positions. We've lost some very fine people from the ranks of job development and placement. Because of the indefinite funding sources you just can't hold good people. Someone else has watched

them in their endeavors and hired them to another state or location. So, there are few regular FTE's. This is a concern and a problem. Taking a look at the new law (1976), the "lifelong learning," it is noted that personal development is a concern. It is going to take the leadership of many to help individuals at all levels within our society. They need more up-to-date educational and work information. Job developers have done excellent things to help with state surveys of business and industry to meet the needs of the industrial sector.

Session I
Tuesday, January 25, 1977

COOPERATIVE EDUCATION PROGRAMS

Dick Gritz

What is Cooperative Education:

(1) Cooperative Education in institutions of higher education is defined by the HEA as that kind of career education that provides an opportunity for full-time students to alternate periods of academic study with periods of off-campus employment. Periods should be of sufficient duration to provide meaningful classroom and off-campus experiences. Cooperative education gives students an opportunity to earn funds that may be needed to support and complete their education; it gives them off-campus experiences that are closely integrated with and that enrich their total education and their academic and/or career goals. The institution assumes the responsibility of placing students in work experiences that will meet these goals.

The educational process must continue to be responsive to changes in society and career opportunities. Cooperative education can help to foster this responsiveness. It blends theory with practice and gives relevance to the classroom experience. Students are given an opportunity to test various work experiences and academic interests at a time when the accepting or rejecting of a career does not have the serious consequence it may have at a later date. Students take back to the classroom their questions, perceptions, and know how from these experiences. Cooperative education programs bring business, industry, and government into direct cooperation with students and educators. It provides for the institutions of higher education a more effective utilization of its facilities and extends academic resources beyond the campus. It provides for the employer a sound, economical source of skilled manpower.

(2) Cooperative education is an organized plan for combining study and work experiences as an integral part of the student's college program. Utilizing learning and training resources not available on a college campus, its purpose is to strengthen the personal development and career preparation of students and to add to their knowledge and guidance.

Cooperative education depends on and serves employers in many fields of endeavor who believe in this kind of education and who hire cooperative students for a variety of productive jobs that have educational value.

Cooperative education is a broad term that can be replaced by other terms including: experiential education, work experience education, field experiences, field studies and others. Cooperative education by my definition may include full time work experiences alternating with full time classroom enrollment called the alternating system, part time employment along with part time classroom enrollment called the parallel system. Cooperative education may include both paid and unpaid positions. The important difference between work experience and work experience education (cooperative education) is the coordination by the institution of higher education. Cooperative education must be an organized system of encouraging, facilitating, promoting, documenting, measuring and crediting the learning that takes place during a cooperative placement. Cooperative education includes but is not limited to cooperative vocational education.

Let me explain the justification for including the term education in cooperative education. Education is the result of learning: Learning involves:

(1) Increased knowledge.
(2) Increased or improved skill development.
(3) Changes in attitudes.

Cooperative education, when properly coordinated, does contribute to increasing the students knowledge about the career he is working toward. His knowledge about work and the relationship of work to living will be expanded. His understanding of people including bosses and fellow employees will surely be improved, as well as the increased knowledge about the firm or agency, the industry and the knowledge necessary for the job itself.

Cooperative education does contribute to skill development. Not only may skills in selling, typing, welding, etc. be improved in a job that is related to those skills but more importantly the whole field of communication, interpersonal communication, and human relations skill development can be improved.

Finally, attitude changes are fostered through cooperative education. Attitudes toward self as well as attitudes toward work, business, government, fellow workers, a particular career, employers, and the community are all influenced and changed in a coop job.

Now that I have described what cooperative education is, let me turn next to what exists in Colorado Junior/Community Colleges.

Cooperative Education in Colorado Junior/Community Colleges:

Because most of what is done in work experience education in Colorado is of a vocational nature and others on the panel will deal with those programs, I will describe briefly what is being done in the academic disciplines in cooperative education. There are three junior colleges in Colorado that are receiving funding under Title IV D of the Higher Education Act of 1965. Those institutions are Arapahoe Community College, Trinidad State College, and Northeastern Junior College. Arapahoe Community College has had a strong work experience education program in the business marketing area for many years. Dale Beckmann is the Director of Cooperative Education there and is making progress in expanding cooperative education in both the occupational and academic areas. Andy Greigo is the Cooperative Education Coordinator at Trinidad and after a year of planning last year is making headway in expanding occupational work experience as well as some academic coop placements. Other schools including Otero, Arapahoe Douglas County Area Vocational School, El Paso, and Community College of Denver have demonstrated progress in expanding work experience education for academic students.

Northeastern Junior College has demonstrated the greatest progress toward developing a comprehensive cooperative education program for all students including the academic students.

Several occupational programs with a work experience phase were developed before federal funds were received in 1974 for the development of a comprehensive coop program. The first program, Agri-Business, began in 1963 with 6 months required alternating periods of classroom training and on-the-job training for a two and a half year period. This program has been very successful and received the Region VIII 1972 award of excellence. Turf Management was developed in 1968 with the same required alternating system, Marketing Management was implemented in 1972 with the same required alternating 6 month periods of work education and classroom study, Secretarial Science began 1974 with optional alternating or parallel coop experiences.

In 1974 with assistance from a federal grant under Title IV D of HEA 1965, NJC began its expansion of work experience education with the ultimate goal of making coop available to all students.

The major thrust for the first year was to test the water. That is:

(1) To see if students were receptive to this non-traditional approach to learning.
(2) To gain faculty support for the concept of work experience education.
(3) To determine if employers were willing to participate in this kind of education by employing coop students.

In the pilot year 1974-75, 86 different students from six academic divisions enrolled in the pilot program for academic students. Thirty-one of these students were in full time cooperative education jobs.

Faculty, especially academic faculty, at NJC had to be convinced of the educational benefits to students of cooperative education. After about one and a half years of promoting coop, faculty accepted the current crediting policy which is actually their approval of cooperative education as a part of the curriculum at NJC.

During the second year of the expanded coop program at NJC, 138 students were in 202 different coop placements with 90 being full time positions with earnings of over $120,000. This is only for academic students. There were more than 100 vocational students in 193 work experience education jobs in 1975-76 academic year.

In the fall of 1976, a new program in Production Agriculture which has two full time work experience education quarters required was added to the NJC curriculum.

NJC now has four occupational programs that require alternating work experience education and optional parellel or alternating coop available to all other students in every division of the college. There are nine part time coordinators in the six academic divisions of the college and one coordinator who assists in coordinating coop activities in all divisions.

My feeling is that cooperative education at NJC has contributed to the quality of the education received by those who have enrolled. This has not and will not exist because of work experience but because of work experience education. Cooperative education is a program within a total curriculum. It is not education by itself but is educational when properly operated and in conjunction with a strong classroom educational program.

What things must be done to make cooperative education experiences beneficial to student learning? First, because cooperative education is a non-traditional type of education some non-traditional methods must be used to promote learning by the student and to measure the learning that takes place. There are several methods that can be used to encourage students to learn. Students must be convinced that there are beneficial things to learn from a job and they must be assisted in finding ways to learn those things. Learning objectives set up by the student with assistance from his employer and faculty coordinator is a good start. Learning objectives encourage the student to select some things he wants to learn as the job begins. Preparation of a daily diary or journal with emphasis on what is learned each day rather than what is done is probably one of the most educational activities in which a student can engage. Documentation of learning can be accomplished through visitations by the faculty coordinator, a final report, employer evaluations and interviews between the faculty coordinator and the employer and between the faculty coordinator and student. When high standards are set by the institution through the faculty coordinator, learning is enhanced.

The portion of the total educational requirements that may be met by cooperative education should not exceed what is being done by colleges and universities across the country. There are some who allow up to 25% of the requirements for graduation to be coop credit. The most common however, is one eighth. At NJC 12 out of 90 credits may be earned in cooperative education. Credits and grades should be based on the learning from the experience. Because learning does take place in a good coop placement, credits should be granted. Cooperative education credit should be elective credit because the course that can be replaced by cooperative work experience is in most cases difficult if not impossible to determine.

Cooperative education credits can be transferred to four year institutions in Colorado and in other states. In Colorado there are several four year colleges and universities with good coop programs. Ft. Lewis College at Durango, Metro State College in Denver, and the University of Colorado at Denver are leaders in comprehensive cooperative education. The University of Denver is expanding an existing program in arts and sciences while Colorado State University is strong in agriculture and forestry.

Concerns:

My concerns about cooperative education are related to quality. Coop credits from Northeastern Junior College will transfer to all four year colleges and universities except the University of Colorado, University of Denver School of Business, and Colorado State University. Until two months ago our coop credits were accepted at CSU, but it seems that an institution in the state has been attempting to transfer excessive coop credits to CSU and now our approval must come from each major department rather than from the institution. I have had coop students working along with coop students from other institutions with no real coordination of students by those institutions. Our coop program suffers when other institutions call work, "education," when actually it is not.

Another concern is the lack of SBCCOE support for work experience education in the junior college. Cooperative vocational education money under Part G of the Vocational Education Act has not been made available through the State Plan for vocational education although most other states do allow junior colleges to apply for and receive funds for the purpose of developing and operating vocation cooperation education programs. SBCCOE has not participated or taken any interest in the Western Association of Cooperative and Work Experience Education (WACWEE) which is an association of work experience educators from eleven western states. Most other states' Education Agencies are involved and are even providing leadership in this association.

Coop and Junior Colleges:

I would add one postscript to what has already been said about the general values of cooperative education. There is an all-pervading feature of cooperative education which has particular relevance in these times of student and public concern about the effectiveness of education and the ensuing pressures for educational reform. Schools and colleges are being pressed for curricular and instructional changes that make for greater relevance in the educational process. There are, however, limits to institutional flexibility and accommodation. A college can never become a wholly realistic laboratory or a substitute for the outside community. At best there is an artificiality about formal education that can be tempered only by one's involvement in the working community. In cooperative education the community becomes an extension of the classroom, the laboratory and the library.

In contrast to earlier periods of our society, youth now grow up with little or no contact with the productive and social forces of our culture. In effect many young adults are displaced from their culture and from responsible contacts with adults. A great deal of learning, especially the process of maturation and socialization, has to take place outside the academic environment, and most naturally in the on-going affairs of the working society.

Cooperative education provides an opportunity for students and the junior college to participate in a variety of productive and service functions in the working world. Living and working independently outside a formal educational structure, which may seem to have "contained" them for years within student walls, creates a new sense of freedom and release. Rubbing elbows daily with adults in productive work engenders a new spirit of self-reliance and responsibility. This kind of experience satisfies one of the strong urges of young adults toward self-development. Formal education tends to constrain students from a natural evolution of learning and personality development--not by design or intention but by tradition and repetitive practice. Experience mixed with formal education breaks the conventional pattern and adds new zeal and meaning to the teaching-learning process both in college and in related experience. For many, learning takes place more naturally as it proceeds from experience to theory and on to broader areas of wisdom and understanding.

I turn now to the general considerations of cooperative education for the junior college. There are many mistaken notions regarding cooperative education:

(1) That it has value only for those whose vocational objectives are well defined.
(2) That it has little relevance to students who plan to go on in higher education.
(3) That it serves only those whose finances are limited.
(4) That it provides students with second class academic education, and others I could mention.

These misconceptions will be clarified by other speakers but let me relate some of them to the junior college situation.

We know that, although a high proportion of junior college students indicate at entrance their intention to go on to a four year college, one half or more of this group do not continue college. Many of these students drop out or leave the junior college with no occupational direction or meaningful preparation for full time employment. With due respect to the academic offerings, the junior college does not fulfill its potential functions for the career guidance of large numbers of its enrollment.

Many of us understand the dilemma many junior college students face in entering college. Because they are unclear about their future plans they hesitate, as they should, to enter career programs which may tend to close off possibilities for further higher education or indeed may narrow down the potential of their vocational development. As a result they enroll for a general liberal arts course which often lacks any degree of career orientation and preparation. Conversely, those who chose career programs may find themselves so narrowly channeled that it is difficult for them to go on with further degree education after junior college if they so desire.

A well designed plan of cooperative education can resolve many of these dilemmas for the junior college student. It can provide effective career orientation and experience in most areas of academic as well as vocational and professional interest. It can be related to practically all curricular fields--Art, Communications, Business, Engineering, Science, the Humanities, and the Social Sciences. It can be extended across the many facets of business, industry, the practicing arts, the health occupations, scientific research, social, educational and public service.

Cooperative education will enable students whose interests and aims are vague and undefined to find meaningful direction for their future career and studies. It will add motivation, relevance and understanding to academic studies. For many it will increase the interest and readiness of further higher education. Those entering with definitely formed vocational interests will have the opportunity to test out these interests and expand or modify them as needed. A cooperative program will assist the large numbers of students who enter full time employment in finding a suitable and meaningful career. In summary I am saying that cooperative education in a junior college can provide the student with a designed program of study, work experience and guidance which will provide a sound basis for his making an intelligent choice for entering suitable full time employment or for continuing with further education.

We know very well that the availability and the cooperation of a wide range of employers is a necessary condition for developing a good cooperative program. Experience with cooperating employers in many programs indicates a strong interest and support of this realistic kind of education. Employers indicated that there are an enormous number of semi-technical and para-professional jobs on which junior college students can be productively employed. Employers also realize the potential personnel needs which can be met by junior college graduates. Both short-range production needs and long-range personnel requirements of our working society along with the educational needs of the student are served in this association of employers and colleges in cooperative programs. The cooperating arrangements require productive workmanship on the part of the students, and responsible management on the part of the colleges and the employers.

Brief mention should be made of the relation of Federal Work-Study funds to cooperative education. As many of you know work-study monies under the Vocational Education and Higher Education Acts can be applied to aid only students with low income and for employment on jobs with nonprofit agencies. In a college with a cooperative program, work-study funds may be used to place students off campus during alternating work periods or parallel work periods. This assumes, of course, that the student and the job qualifies for work-study funds and that the placement is a suitable one. In this way a Federal Work-Study project may be contained in part within a cooperative education program.

In concluding, let me repeat my belief in the significant contribution which cooperative education can make to the junior colleges in the self-development of its students, in the strengthening of its curriculum and instruction, and in the enlargement of its services to its community. Later discussions will, I hope, bear on the ideas and questions raised in this presentation.

Session I
Tuesday, January 25, 1977

COOPERATIVE VOCATIONAL EDUCATION PROGRAMS IN COLORADO

(A Research Study Review)

Charlene Collins

A survey instrument was developed in an attempt to put together a picture of cooperative education in public postsecondary institutions in the State of Colorado. There are 34 cooperative vocational education programs in community/junior colleges; 13 programs in area vocational schools and none in local school districts for the adult learners. The following data presented are based on selected portions taken from the results of the survey. A survey instrument was designed in two parts--Part I was mailed to the top administrator at each institution. Part II of the survey was mailed to each coordinator listed by the administrator in Part I.

Twenty-three coordinators representing 28 programs from 16 institutions responded to the questionnaire.

In the COORDINATOR INFORMATION category of the survey (Chart I), the majority of coordinators averaged 11 to 15 teaching contact hours weekly, coordinated 1 to 5 hours per week and were not full time coordinators. All respondents had some type of related training for cooperative education, even though the kind of training varied.

Item number two in PROGRAM INFORMATION (Chart II) indicated a wide variance of credit hours required. Responses in item number nine showed some type of structured class or session as a part of the majority of coop programs. The responses in number twelve showed coop training stations were not confined to the local geographical area. It is possible for a coordinator to place a student in another state or country. One method of having these students supervised is by locating a school in that area who has a coop program and make arrangements for their coordinator to do the supervision. The Cooperative Education Association has a publication showing institutions offering coop education.

On the MOST COMMON PROBLEMS OF COOP COORDINATORS, (Chart III) a heavy teaching load was ranked as the most common problem of coordinators. In item number 4.5, Administration Support Weak, interviews and visitations showed terminology to be a significant factor even though a set of definitions had accompanied both parts of the questionnaire. The responses reflected items and applications significantly different from the concepts presented in the definitions. A breakdown in communications between administration and instructional personnel may be an underlying factor for these responses.

COMMUNITY JUNIOR COLLEGES in the survey were coded (Chart IV). Institution L, the third smallest, has the highest number of programs and the largest number of students enrolled. The largest institution, F, has fewer programs, and student enrollment in the 1975-76 school year was only 25 percent of the number enrolled in coop programs at institution L. The State Board for Community Colleges and Occupational Education supplied some of the data used in this chart.

Chart V shows AREA VOCATIONAL TECHNICAL INSTITUTIONS that are operating coop programs on a small scale but their enrollment for Fall, 1976, has increased.

Chart VI indicates that there is an increase in the number of persons in cooperative education which supports and endorses the concept.

The survey results that have just been presented indicate certain weaknesses, strengths, and possible avenues for us to explore.

1. Terminology and definitions need to be agreed upon so everyone is operating from the same base or same frame of reference.

2. The faculty workload concept is very evident. We cannot expend energies on a volunteer basis. With the impetus of collective bargaining, this becomes an extremely important factor.

3. It is necessary to define the role of the coop coordinator. What are the duties and responsibilities of this position?

4. What is the relationship between the credit hours and the dollars generated? Credit hours required in coop programs vary extensively. A school requiring 600 hours of coop might have to close down another program in order to have enough monies to operate those 600 coop hours. A requirement of 6 credit hours would not pose this same problem.

5. Another avenue to explore is an analysis and recognition of time and cost as it relates to income generated.

CHART I
COORDINATOR INFORMATION

	No. of Responses
1. What length of time has program been in existence?	
1 to 5 years	10
6 to 12 years	10
2. How long have you been a coordinator in this program?	
1 to 5 years	15
6 to 12 years	6
3. How many contact hours per week do you teach?	
1 to 5	2
6 to 10	1
11 to 15	7
16 to 20	5
Over 20	4
4. How many clock hours per week do you coordinate?	
1 to 5	7
6 to 10	3
11 to 15	4
16 to 20	1
Over 20	6
5. Are you a full-time coordinator?	
Yes	8
No	13
6. Do you receive release time?	
Yes	7
No	10
7. Do you receive extra compensation?	
Yes	9
No	8
8. During which hours do you coordinate?	
Day	18
Night	6
All	3
9. What types of cooperative education training have you had?	
Course Work	15
In-service by institution	5
In-service by SBCCOE	8
In-service by teacher-training institutions	6
Experience with another program	1
OJT	1
Army	1
School of hard knocks	1
Thesis	1

CHART II
PROGRAM INFORMATION

			Number of Responses
1.	Is cooperative education required?	Yes	11
		No	7
2.	What credit hours are required?	Minimum	3 to 150
		Maximum	6 to 800
3.	Do you have sufficient training stations?	Yes	10
		No	5
4.	Do you accept unemployed students?	Yes	13
		No	3
5.	Are training stations found for unemployed students?	Yes	14
		No	2
6.	Is cooperative education offered during the summer quarter?	Yes	14
		No	6
7.	During which times is cooperative education available?	Day	8
		Evening	1
		Both	10
8.	Is your institution used as a training station?	Yes	8
		No	8
9.	Are the following a part of cooperative education?		
	Related class	Yes	7
		No	2
	Introduction/Orientation Session	Yes	8
		No	2
	Follow-up Session	Yes	7
		No	2
10.	Do you screen students before acceptance?	Yes	10
		No	5
11.	Do you have a functioning Advisory Committee?	Yes	12
		No	5
12.	In what geographical areas do you place students?		
	Local		10
	State		6
	National		3
	International		2

CHART III
MOST COMMON PROBLEMS AS RANKED BY
COOPERATIVE VOCATIONAL EDUCATION COORDINATORS

1. Heavy Teaching Load
2. Insufficient coordinating time
3. Distance to travel
4.5 Administration Support Weak
4.5 Student's Schedule Inflexible
6.5 Relationship with Veterans Administration
6.5 FTE Funding

Others not ranked:

Relationship with other education/work programs

Evaluation of Students

Insufficient reimbursement for travel (12¢ per mile)

Quality areas in which to work

Overlapping teaching schedule with students' working schedule

CHART IV
COMMUNITY JUNIOR COLLEGES*
COOPERATIVE VOCATIONAL EDUCATION

Code	Average Per Qt. Headcount 1975-76	Average Age of Students	No. of Programs	No. of Programs Reporting	No. of Students 1975-76	No. of Programs Reporting	No. of Students Fall--1976
A	2948	18	7	3	113	3	83
B	4768	29	1	1	131	1	75
C	3186	30	3	2	104	2	127
D	1302	31	No response				
E	1400	32	0				
F	7641	30	5	3	57	3	29
G	5202	31	3	3	56	3	13
H	3978	30	4	4	206	4	26
I	5806	34	No response				
J	458	27	No response				
K	744	31	No response				
L	1035	23	8	5	228	5	83
M	1391	28	3	2	28	2	27
N	1347	29					

CHART V
AREA VOCATIONAL TECHNICAL SCHOOLS
COOPERATIVE VOCATIONAL EDUCATION

Code	No. of Programs	No. of Programs Reporting	No. of Students 1975-76	No. of Programs Reporting	No. of Students Fall--1976
I	0				
II	0				
III	1	1	5	1	10
IV	0				
V	0				
VI	No response				
VII	6	1	12	1	15
VIII	6	3	183	3	145
IX	No response				
X	0				

CHART VI
STUDENTS ENROLLED IN
COOPERATIVE VOCATIONAL EDUCATION

	1975-1976 Per Quarter Average	1976 Fall Quarter Enrollment	Percent of Increase
Community Junior Colleges	308	463	50
Area Vocational Schools	67	170	154

Session I
Tuesday, January 25, 1977

VETERANS ADMINISTRATION RULES AND REGULATIONS ON COOPERATIVE EDUCATION

W. P. Hardwick

I. Background--First of all, as a basis for my discussion, I would like to provide some background information as to how the Veterans Administration is organized and operates. As I am sure most of you are aware, the Veterans Administration is primarily an administrative agency which is mandated to carry out the laws that are legislated by our Congress. The basic laws which we are required to follow are contained in Title 38 U.S. Code.

From the laws that are enacted the Veterans Administration is required to promulgate regulations implementing those laws. Those regulations are required to be published in the Federal Register for a period of at least 30 days during which time interested and/or concerned parties or individuals have the right to submit comments. If any comments are received, the Veterans Administration is required to review the regulations in light of the comments and republish the regulations and the comments for another thirty days. Once the new regulations have been approved, they then carry the force of law since they have been approved on the Federal level based on Federal laws.

Once the regulations have been approved, the actual operating procedures usually come out in the form of manuals that are provided to all Veterans Administration Regional Offices along with the regulations. In addition to the manuals interim publications such as Veterans Administration circulars or other publications are sent out on a continuing basis to all offices concerned. This would be particularly true when Congress passes some new legislation that would have an immediate impact. Most of the publications that are of concern to schools are sent to the school.

Approved programs of education and/or training are first approved by the State Approving Agency in conjunction with the laws and regulations of the Veterans Administration. The specific criteria must be in effect and followed by the schools before the program can be approved by the State Approving Agency and payments authorized to eligible beneficiaries by the Veterans Administration. It is important to note that in a great many of the cases the criteria is very specific and may be different from what is required in some cases of other non-veteran students. For our purposes, we are concerned with those laws and regulations that primarily concern veterans. It is also important to note that in most cases we would expect that veterans be treated the same as non-veterans in respect to tuition, fees, school policies and other similar matters.

II. Veterans Administration Position on Cooperative Education--Title 38 U.S. Code which I mentioned previously does provide the Veterans Administration with the authority of approving combination programs. One of those combination programs may consist of a combination of courses with instruction offered by a school which alternates with instruction in a business or industrial establishment. This type of program can be and is most beneficial to veterans and other beneficiaries, particularly when it is a strong program offering further enrichment to the students involved. I know from personal experience that classroom training is beneficial only up to a certain point. The material learned from the text books is useful only to the extent that it can be applied to any given situation. Most of the learning tends to take place in actual work situations. For example, in my own case, I do believe that I learned more my first year teaching school than I did during my four years of college. This type of philosophy I believe also applies to the cooperative type of training where a student spends a certain amount of time in the classroom and an additional amount of time actually working in a business type situation.

III. Definitions--Let me define for you if I can what we mean by a cooperative education program as specified by law and the Veterans Administration Regulations. As I mentioned earlier, it is a combination of courses with instruction offered by a school alternating with instruction in a business type atmosphere. I may expand on that by providing some further details which you may find useful. For this particular type of cooperative course to be approved, the school must show to the satisfaction of the State Approving Agency that the alternate in-school periods of the course are at least as long as the alternate periods in the business or industrial establishment. The cooperative course as set up must be listed as such in the school catalog or other literature of the school. The records must show

that the school itself arranges with the employer's establishment for providing the alternate on-job periods of training on such a basis that the on-job portion of the course will in fact be training in a real and substantial sense and will be a meaningful supplement to the in-school portion of the course. The school arranges directly with the employer's establishment for placing the individual student in that establishment and the school will in fact exercise supervision and control over the activities of that student while he/she is in training in the establishment to an extent that assures training in a true sense. In addition, the school must grant credit for the on-job portion of the course for completion of a part of the work required for granting a degree or diploma. This last requirement can be particularly important in having a program approved by the State Approving Agency and the Veterans Administration. The program must be approved as a whole, including the school activities and the on-job activities.

I might offer some additional explanation at this point which may be somewhat redundant in nature. The off-campus courses which I have described earlier must meet all of the following conditions. The course is:

1. Accredited by a nationally recognized accrediting agency or is offered by a school that is accredited by one of the regional accrediting associations.

2. A part of the approved curriculum of the school.

3. Directly supervised by the school.

4. Measured in the same unit as other courses.

5. Required for graduation.

6. As a planned program of activities described in the schools official publication which is approved by the State Approving Agency and which is institution in nature as distinguished from training-on-the-job. The description shall include at least the following:

   (a) A complete unit subject description.
   (b) Provision for an assigned instructor.
   (c) A statement that the planned program of activities is controlled by the school and not by the officials of the job establishment.
   (d) A requirement that class attendance on at least a weekly basis be regularly scheduled to provide for direct interaction by the instructor and the student.
   (e) A statement that the appropriate assignments are required for completion of the course.
   (f) A grading system similar to the system used for other resident students offered by the school.
   (g) A schedule of time required for the training which will demonstrate that the student spend at least as much time in preparation and training as is normally required by the school for its other resident courses.

Again, I must repeat that all of the above conditions must be met before a cooperative course can be approved by the State Approving Agency and meet the requirements of the appropriate Veterans Administration regulations.

IV. Problems and Concern--Let me address for a few moments some questions that we commonly receive. Again you may find that some of these questions and answers are somewhat redundant in nature and are offered only as further clarification to what has already been said.

A work experience course must be a part of an accrediting program for approval. Either the course must be accredited by a nationally recognized accrediting agency or must be offered by a school that is accredited by one of the regional accrediting associations. (Candidate for accreditation will not meet this requirement.) A work experience course may be a part of a non-college degree program as well as a degree program. In other words, if the course meets the requirements of the Veterans Administration regulations, it may be a part of either type of program. If the program is measured in credit hours, three hours of work experience is required for each hour of credit. If the work experience course is a part of a non-college degree program, the school is then responsible for reporting absences and, therefore, must have a means by which to receive the required attendance information from the work experience sight.

If the work experience course is required for completion of a particular program but cannot meet the requirements of the applicable Veterans Administration regulations, then the remainder of the program minus the work experience portion cannot be approved. To state it another way, the State Approving Agency and the Veterans Administration can approve for Veterans Administration benefits the entire program, not a portion of it. Again, please remember that I am addressing only those regulations that pertain to veterans and/or beneficiaries under laws administered by the Veterans Administration.

There is no limit to the number of hours which may be devoted to work experience classes in a term. The work experience class may be a part of or all of the clock hour credit hours in a given term. The majority limitation is for the entire program in which the school portion and the work portion must be approximately equal.

A common question we receive is whether there must be one class attendance hour for each three credit hours or nine clock hours of work experience. The answer to that question is no. However, there must be at least weekly, regularly scheduled class sessions to provide student-instructor interaction; however, one session will meet the requirement whether the work experience course constitutes all or a part of a term's total hours. In addition to this, I should remind you that a weekly visit by the instructor to the work experience site for performance discussion on the job with the student does not meet the requirement for a weekly class session. The attendance I mentioned earlier must be in a classroom to provide the necessary student-instructor interaction.

The statement that the "planned program of activities is controlled by the school" can be made only if a system has been instituted whereby a school official confers with the employer showing him or her the course description and working out a method to insure that the planned program of activities will be carried out. The objectives of the course must be defined by the school not the employer.

For a school to demonstrate a planned program of activities, the official catalog or school publication upon which approval is based must describe the planned program of activities. A simple statement that the course consists of supervised work experience is not adequate to meet this requirement. Specificities must be provided.

Appropriate assignments are those assignments which are in keeping with the course descriptions and objectives and which assure that the planned program of activities is being carried out. As an example, you could perhaps have a work experience course in business management which might use a personnel office as a training situation. An appropriate assignment might be one which requires the student to submit a paper describing how employees are managed in a firm, indicating his/her opinion of the quality of personnel management, and stating what improvements the student would make. To place it in a rather general context, the school is to provide for the appropriate assignments and the appropriate assignments must be job related.

V. Cooperative Education Within the Veterans Administration--This is a program which is long established but seldom used. I want to mention it only briefly because I feel it does not apply directly to the specific content of this seminar. This type of cooperative education to which I refer provides for periods of study together with periods of related employment in both the public and private sectors. In this sense, the student actually receives, in most cases, a salary or wage from the employer. In a majority of cases, adequate credit is given for work experience at the college level. The Federal Government is the largest single employer; however, state and local Government participation is growing. In the appropriate situations, grant monies are awarded to colleges to enable colleges to initiate, strengthen, and expand their cooperative education programs and to provide for training and research. The money is not used to subsidize students' salaries during their periods of work experience. This type of cooperative education provided one method for strengthening the career service in professional, administrative, and technical occupations. Agencies can build into their staffing plans and work force certain factors which are often not realized except through a program such as cooperative education. By this means, we would attempt to attract to the federal service students who are preparing for careers that are or are anticipated as being "in a shortage category", either nationwide or in limited geographic areas. This type of program encourages students' interests in new or developing occupations or professions, supports equal opportunity, provides early exposure to the work environment for college students who are physically handicapped, relieves situations in which recruitment traditionally has been limited exclusively to one sex, builds understanding of federal job opportunities among students and college personnel, and brings about a stronger relationship between students. The agencies have final responsibility for selection of students

recommended by colleges. There are certain requirements which must be met and an agreement must be reached which includes certain specific information. Any schools which might be interested in this type of program should contact the Civil Service Commission or perhaps the personnel officer of a particular federal agency. Either would be more than happy to supply further details.

IV. Recommendations--In reference to my earlier discussions of student work experience courses, I would suggest that representatives of the schools contact the State Approving Agency and the Veterans Administration Liaison Representative. Both would be able to work in an objective manner with any school to help establish an educational/work program which will meet the requirements of the Federal laws, the regulations of the Veterans Administration and any other specific criteria established by the State Approving Agency. School representatives should insure that they are fully familiar with the approval requirements, the reporting requirements, and the certification requirements. They should also assure that their programs are under the control of the school and not the employer.

For those of you who represent schools here in the State of Colorado, I would suggest that you contact B.J. Scott, Liaison Representative, of the Veterans Administration Regional Office in Denver. Her telephone number is 234-3502. In addition you may also contact the State Approving Agency. Their address is 503 Social Services Building, 1575 Sherman Street, Denver, CO 80203. If any of you are representatives of schools outside of Colorado, I would suggest that you contact your own State Approving Agency or its counterpart if known by a different title and also contact the Liaison Representative of the Veterans Administration Regional Office which has jurisdiction over your area.

My thanks to you for allowing me to take up this portion of your valuable time. My thanks to the other people responsible for organizing the seminar and inviting me to be a participant.

Session I
Tuesday, January 25, 1977

FINANCING VOCATIONAL PROGRAMS AT THE POSTSECONDARY INSTITUTION

Paul Gaiser

We need to take a look at cooperative education particularly at the postsecondary level. We synonymously use terms such as Cooperative Education, Work Experience, Work Study, Work Experience and Studies, On the Job Training, Internship, Cooperative Work Experience, Field Experience, Externship, and Outside Work Study. These terms confuse not only our legislators, but partners in business, industry, our students, and would you believe it, even ourselves. In a similar manner, we overwork the term technician, do you remember that? Do you remember those poignant program titles like: household technician, and stable technician? None of these are a figment of my imagination, they have all come off of program proposals in Colorado.

I have been asked to share with you, the State perspective of financing vocational education work programs in postsecondary institutions. But at the risk of oversimplifying a very complex funding network which conceptually contains the postsecondary system, for the delivery of vocational education; let us key on some pertinent basic issues.

In your program you have some terms defined and we heard some this morning and I would like to give you some from the State Board's viewpoint. Historically, the State Board has taken the position that postsecondary cooperative education is a method of instruction and not a program. It is not an isolated instructional community and junior colleges and independent vocational schools exceeded $1,000,141. Now admittedly, these funds were not restricted to the occupational students, but their impact upon meeting student needs balanced the scale and made the priorities decisions easier. We have elected on the State level not to fund work study on the postsecondary level because the State and Federal appropriations to the Commission of Higher Education are eminently larger, we can do more things with vocational dollars. Therefore, we have elected to prioritize the expenditure of those funds at the secondary level.

Now let me discuss funding vocational education on the postsecondary level less than a baccalaureate degree. The basic unit for State funding is the FTE, (the full time equivalent student). In this funding unit, it is common to the independent vocational schools, the local district community junior colleges, and the State system community colleges. The FTE is 45 credit hours or 30 semester hours generated by a student or a combination of students. Occupational credit hours are generated by occupational students enrolled in approved occupational courses. Credit hours for courses are computed as follows: The first basic unit is the lecture seminar discussion credit, one quarter/semester credit hour is awarded for each one classroom contact hour of instruction per week or per quarter. Compare that with the vocational technical laboratory credit, two quarter/semester hours of credit are awarded for each three hours per week or per quarter. Cooperative education credit, one quarter or semester hour credit is awarded for each three hours of on-the-job per quarter or semester. These experiences usually include those activities which are the result implementing experiences in the classroom and in the laboratory. The last criteria provides funding for program. This is particularly true at the postsecondary level. Additionally, the State has encouraged the use of cooperative methods in all regular program offerings at both the secondary and the postsecondary levels. The criteria used in defining cooperative education at the State are highlighted by, but not limited to the problem.

(1) The student be provided with a variety of job experiences which may include rotation through different sections or departments as prescribed in the training plan.

(2) That the student be paid for his or her performance on the job.

(3) That the student earns credit for his or her cooperative education performance.

(4) The job visitations by the coordinator are linked with the employee conferences which collectively provide the business for evaluating the students problems.

(5) The classroom activities provided which are directly related to the job activities and the students occupational objective. Contrast this criteria for cooperative education with other work experience opportunities. Typically their criteria list as follows: Job rotation is usually coincidental rather than a part of the training plan. The student may or may not be paid for his or her work experience. The student may or may not earn credit for that experience and supervision by the institutional personnel is usually limited to only the approval of the job.

(6) The classroom activities, if any are usually not directly related to the job.

Work Study Programs. They are not funded with Federal or State vocational dollars at the post-secondary level in the State of Colorado. The reason for the States position is as follows. First, this fiscal year total allocation under Part H of the Act, the amendments of 1968, totaled $213,331. Secondary requests alone exceeded $450,000. Work study funds appropriated by the State and Federal funds through the permission of the higher education to cooperative education. Where the opinion of the ratio, relatively speaking, favors the cooperative method of instruction over the other two. Additionally, we believe the formula provides for greater flexibility of the program design at the local level. Now another dimension in the issue of funding occupational education at the postsecondary level is focused on diversity. Although the basis for funding is uniformly fabricated upon the credit hours generated by the students. The funding for FTE varies dramatically between institutions. The FTE revenue ranges from $1,100 to $1,600 per FTE in the State System Community Colleges. The funding level is established by the Colorado General Assembly. FTE funding appropriations for local district colleges is legislated at $1,175 per FTE. However, this figure may be prorated in the event the institution exceeds its approved number of FTE's. It is an institutional prerogative to local district colleges if they prorated at 4,000 FTE's and they plan to go to 4,200 FTE's they won't get $1,175 FTE's it will be prorated proportionately. But that again my friends is an institutional decision. It is appropriate to mention at this time that local district colleges also obtain revenue from local real levies. The independent area of vocational schools are eligible legislatively to receive $1,175 for FTE. But the wording is cast in a little different framework, it says "may receive up to." And to date, they have not received full funding. The funding dilemma is perpetuated by the fact that even though the basic unit of funding is calculated the same the levels of funding of those units vary dramatically among institutions. Where it is possible, the State Board has attempted to equalize the differences by supplementing deficits with federal funds. Cooperative education in the community/junior colleges and independent area schools has been funded predominantly with State funds through credit hours generated by students enrolled in courses designed to include a cooperative method of instruction. There have been instances in which class size cooperative vocational programming were initiated at the postsecondary level, with students with special needs. To date, state priorities for funding cooperative vocational programs under part "G" of the 1968 amendments have been limited to programs at the secondary level. Highest priorities for funding were signed to areas which have highest rates of potential dropouts , school dropouts, and youth unemployment. That is consistent with the priorities established in the Federal legislation. The fact remains that there has never been sufficient dollars for coop "G" to meet State requests. Not even at just the secondary level. Consequently, the State felt that the maximum impact can best be realized through a preventative effort at the secondary level. Perhaps public law 94-482 for 1976 will provide for new flexibility as well as for new methods for funding. My guess is that they will be even more restrictive than our past legislation was.

Session I
Tuesday, January 25, 1977

FINANCING COOPERATIVE EDUCATION IN HIGHER EDUCATION

Norbert Baumgart

I really don't know of any way to deal with matters of law in a light, clever, or humorous way, I'll simply try to be accurate and I'll try to stay very close to the public law that set forth these '76 amendments through the Higher Education Act. And so it is my pleasure to comment on these 1976 amendments as they relate to the topic of cooperative education and to the topic of continuing education and lifelong learning. I've been asked to comment and to focus my thoughts particularly on those three areas. All of this is a matter of law as I have indicated now in Public Law 94-482 which I call to your attention as an excellent reference point as you try to understand the amendments to the Higher Education Act that just occurred late in Fall. This was an action, as you know, of the 94th Congress.

So, first directing my comments to the area of Cooperative Education. Title 4D was eliminated and in its place Title 8 of the act as amended. It authorizes the U.S. Commissioner to make grants to institutions of higher education or to combinations of institutions for the purpose of "Planning, establishment, expansion or carrying out a cooperative education program." Such programs shall provide alternating periods of academic study and public or private employment. Students are given an opportunity to earn funds necessary for continuing or completing their education. But so far as is possible giving them work experience related to their academic or occupational objectives.

The grant amounts that were authorized are as follows and incidentally if you have not caught up with the fact that the Federal Government has changed its federal fiscal year from July 1 to June 30 to October 1 to September 30, you might want to take note of that. Fiscal year 1976, thirteen million has been authorized; fiscal year 1977, fifteen million; fiscal year 1978, twenty million; fiscal year 1979, twenty-five million; fiscal years 1980, 1981, and 1982, three million. I emphasize again, that is, under the divisions that deal with training, demonstration or research grants or contracts, the appropriations under this title shall not be available for payment of compensation of students for employment by employers. From the sums appropriated, the commissioner is authorized to award grants in the following amounts: 175 thousand dollars is the maximum amount that can be awarded to any one institution in any fiscal year; however, if institutions are involved in a combination or in a consortion of these, the formula is 125 thousand dollars times the number of institutions participating in a combination or consortion. That is the maximum amount that can be awarded in any Federal FY.

No institution of higher education may receive individually or as a participant in a combination of such institutions grants for more than five years. No such institution or combination may receive a grant in excess of 100 percent of the total administrative cost of the first year, a grant in excess of 90 percent for the second year, a grant in excess of 80 percent for the third year, a grant in excess of 60 percent for the fourth year, and a grant in excess of 30 percent for the fifth year.

The commissioner shall give special consideration of applications which: (1) show greatest promise of success because of the extent to which programs in academic disciplines, with respect to which application is made have had a favorable reception by employers; (2) applications that show greatest promise because of the commitment the institution has to cooperative education. As demonstrated by plans to continue the program after termination of federal financial assistance.

The commissioner is also authorized to provide for the training of persons planning, establishment, administration, or coordination of programs of cooperative education, or projects demonstrating or exploring the feasibility or value of innovative methods of cooperative education, or for research into methods of improving, developing or promoting cooperative education programs and to make grants. Grants or contracts with institutions of higher educations or combinations. In order to make grants or contracts with other public or private nonprofit agencies or organizations and such grants or contracts will make an especially significant contribution to obtaining the objectives of cooperative education.

The deadline date for applications is in the late Fall. The Federal Register is the best source of information on this subject.

Continuing Education and Lifelong Learning

From my point of view a very good definition of the continuing education program is the one found in the 1976 amendments to Title I of the Higher Education Act of 1965. I quote from the amendments: "The purposes of this title, the term 'continuing education'program' means postsecondary instruction designed to meet the educational needs and interest of adults. Including the expansion of available learning opportunities for adults who are not adequately served by current offerings in their community." Lifelong learning is another term relating to the continuing education of adults. U.S. Congress defined the lifelong learning as follows: "Lifelong learning includes but is not limited to, basic adult education, continuing education, independent study, agricultural education, business education, and labor education, occupational education and job training programs, parent education, postsecondary education, preretirement and education for older and retired people, remedial education, special education programs for groups or individuals with special needs and also educational activities designed to upgrade the occupational or professional skills, to assist business, public agencies or other organizations in the use or innovation of research results and to serve family needs and personal development." Congress recognized in these amendments that the american people need lifelong learning to enable them to adjust to social, technological, political and economic changes. The Congress states further that "lifelong learning has a role in developing the potential of all persons including approval of their personal well being, upgrading of their work place skills and preparing them to participate in civic, cultural and political life in the nation."

To carry out such a broad program of lifelong learning as I identified, the Congress authorized appropriated twenty million dollars for fiscal year 1977, thirty million dollars for fiscal year 1978, and forty million dollars for fiscal year 1979. This is enabling legislation appropriation only. In addition, it is extended at authorization levels of forty million per year. The assistant secretary for education for HEW is responsible for lifelong learning part of the law. There are some regulations, guidelines, but they will not be available until approximately June.

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FINANCING OTHER FORMS OF EDUCATION/WORK

Robert Rangel

The best source of funds available under this topic are those Federal and State Agencies which have already been funded by HEW, DOL, etc. such as CETA, WIN, SER, CMC, etc. Some of the major benefits derived from development and coordination with these agencies for the postsecondary institutions are:

1. Recruitment of target communities.
2. Provide for social and educational counseling.
3. Provide for student stipend to attend postsecondary institutions.
4. Provide for tuition and book fees.
5. Have goals and objectives defined.

As we have experienced in the past, and are experiencing in the present, some form of the above mentioned agency has existed with us. As to the future, there is now doubt that these agencies will survive. What does this mean to the postsecondary institutions? It means that programs developed and implemented in coordination and cooperation with these agencies have stability, only as long as the programs developed change to meet the needs of the new student.

Locally funded agencies are, in my opinion, the next best source of financing educational/work programs in a postsecondary institution. Examples of what are referred to as locally funded agencies are:

1. Community service organizations.
2. Church organizations.
3. Business organizations.
4. Fraternal organizations.
5. Fund raising groups.
6. Human improvement and development groups.
7. National services.
8. Professional groups.
9. Social organizations.
10. Volunteer groups and many others.

These organizations whether developed singularly and/or collectively, can provide new students the opportunity of attending a postsecondary institution educational/work program by providing such basic needs as food and shelter, as well as books and tuition fees. As an example of the above, a student's housing could be provided by one of the Weld County Shelter Homes; books and tuition fees can be paid by the Colorado Migrant Council or one of the professional groups; food could be provided by Weld County Information and Referral; glasses can be secured from the Lions Club; and clothes are given by Salavation Army. Some of the major benefits to the postsecondary institutions' educational/work programs are:

1. Recurrent enrollment provided for through the use of referrals.

2. The postsecondary institution becomes the expert of education, thus providing for all the educational needs of the local community.

3. The target students come better prepared to involve themselves in educational/work experience.

In conclusion, the Federal, State, and Local agencies serving the target groups within the service area of the postsecondary institution can be employed in the facilitation of financing other forms of educational/work programs.

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TASK GROUP CAUCUS

Each task group leader caucused his/her groups to (1) secure responses to the tasks listed below and (2) formulate clarification questions to be asked of Session I presenters by the task group leaders.

T--A1 Review the terms and definitions as found in the conference notebook and make recommendations as to categorizations and descriptions:

Extended day plans sounds like an on-the-job training. Work study--this is a college program designed to provide financial assistance or part time employment with a public and present employers. It is designed for students who need such aid to enter or continue their education at a vocational program. Work experience--students undertake unpaid or paid employment experiences. The work experience usually is not structured to meet an educational objective. Adult--any individual beyond the age of compulsory school attendance who is not attending full time public school. In Colorado, the minimum age is 16. Cooperative education--the formal or informal structural plan which combines learning experiences through employment. We changed the last part of coordination. Paid employment--those experiences which are paid for either monetarily, socially, educationally or physically. Coop G programs were designed primarily for potential dropouts and dropouts. The funds are not adequately available to the students who need it most. We have programs now that are being operated at the junior high school level. Extended day program is not used in Colorado but is successful in other states. Students gain credits working while they are also going to school. We should split cooperative education and cooperative vocational education.

T--B1 and T--B2 Discuss the organization of Education/Work Programs in Colorado and delineate apparent needs.

The following summary points highlighted the discussion:

* Criteria are needed for establishing postsecondary cooperative programs.
* Priorities should be established.
* Vocational education should be perceived as an important part of the career development process.
* Funding in relationship to FTE is not understood.
* There is no central place for obtaining information in Colorado on postsecondary education/work.
* There are different agency guidelines for postsecondary education/work (i.e. Veterans Administration, etc.)
* Administration must provide a leadership role.

T--C1 and T--C2 Discuss the administration of Education/Work Programs in Colorado and delineate apparent needs.

The following summary points highlighted the discussion:

* Evaluation of existing programs is a primary concern.

* Administrative commitment which is long-term is needed

* Coordination of existing programs is important, especially in the Metro area

* FTE allocations and funding need immediate attention

* Acceptance and use of common definitions

* Inservice education for teacher/coordinators and administrators

* Coordinator of coordinators who has authority as well as responsibility for education/work

* Educators need to redefine their roles in relationship to education/work

* Better utilization of computers for improving communications

* The major problem is one of communication

* Alternate and parallel systems of organization not understood

* Emphasis should be placed on career development of women and minorities through cooperative education

* Only those who show some sign of commitment should receive FTE funding

* Administrative commitment needed

T--D1 and T--D2 Discuss the financing patterns of Education/Work Programs in Colorado and delineate apparent needs.

The following summary points highlighted the discussion:

* Financing of education/work is very confusing.

* There are two kinds of needs: (a) institutional needs and (b) student needs. From the students' standpoint the need is to obtain total benefits for active educational performance. From the institutional point of view there is a need for better understanding of cooperative education.

* Programs started with Federal funds then expect the state to continue the support.

* Perhaps funding could be broader if the definitions were broader.

* There is no comprehensive cooperative education system because no institution has made such a proposal

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FORUM

Q. I would like a clarification of Coop G.

A. Coop G programs were designed primarily for potential dropouts. One of the priorities is that it must be given in an area of high youth unemployment. The State has predominantly put the Coop G at the secondary level. The funds are not adequately available to serve the students who need it the most. There are four Coop G programs at the junior high level now that are very successful.

Q. What is the age range for work study?

A. As I understand it, the age range for work study is 15 to 21.

Q. What criteria was used to establish priorities for coop programs in the secondary schools as opposed to establishing on the postsecondary level? Who makes these decisions and what was the rationale?

A. I honestly can't answer the first question about who assigned the priorities and what the rationale was for assigning them. The State Board has been on record for some time. There is top priority for vocational education in the State of Colorado at the secondary level. Work with our youth at an early age. Over the long run, possibly, we will minimize our needs to take care of our students with special needs at the postsecondary level.

Q. Within the definition of lifelong learning, how does vocational education and career education fit into the definition?

A. The definition of career education is a process of lifelong learning. Vocational education is a part of the career education process. Career education is an umbrella over the whole educational program.

Q. Why does the State Board, as an approval agency for programs, not use the same criteria for the approval of veteran programs?

A. It serves completely two different functions. They are under two different hats.

Q. Can there be a special clearing house, a computer base for all the different kinds of programs that are offered that might include work education to provide people one central agency to get information and guidelines?

A. Thank goodness we don't have a State agency that dictates what we do in academic cooperative education. I am concerned with quality. I am opposed to a centralization dictating what we can do. I do think we could look to each other and find ways of improving and be concerned with quality.

Q. Is there any way that there can be a structure set up to join the project committee, the general assembly to the needs for work education programs in Colorado?

A. There is another source, and that is through a proposal under Title 8. Maybe the State could come up with some funds.

Q. Does FTE limit cooperative work experience growth? Does it force a capping of enrollment?

A. As long as funds are provided, it encourages more and more of our programs to be a part of this and, therefore, you might tend to inflate the FTE against your appropriated FTE. I know of no better alternative. There is a danger in providing high front-end costs to get programs off the road. We start programs with Federal funds and then back out and expect the State to pick up the tab.

Q. If some of the definitions were broader could the program funding be broader?

A. Yes, it can be providing you do not violate the original incentive of the Federal legislation. You could spread it thinner to serve more students at a considerably lower level.

Q. Are your Federal funds under Title 8 limited in nature in time so that they do fade out eventually?

A. Yes, under Title 4D the amendment was three years. Under Title 8, it has been extended to five years.

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CONFERENCE SUMMARY AND OPINIONS

Jerry Kiefer

I don't pretend to speak for the Community Colleges in Colorado, but I hope I can speak from a community college point of view. We are thankful that the agenda does say that not only do we have to give a summary, but give opinions which, therefore, opens it up a little more to us. I hope that my comments will capsulize what I have heard both from the morning session and from the names this afternoon. I also hope that I will not be repeating what we just heard in the forum.

I think many of the needs and concerns of the community college level have been spoken to. Perhaps the problems have been spoken to and also some ways of dealing with the problems, or a practical way to live with what we have now. I will just give a brief overview, perhaps philosophical, but I think maybe it will bring together where I believe the community college is.

To begin with, it seems to me that it is very important that both the community college and the community understand what it is all about. The Community Colleges basic purpose is to provide certain services to the community, for the community, and to respond to the needs of the community. For example, to provide a transfer type program to provide occupational or job increase programs, to provide developmental education, to provide continuing education, and lifelong education. I hope more and more commitment on the part of all areas of funding can be given to that. Basically, the community college is committed to responding to the needs of the community as those needs are recognized by the particular institution. Of course, that is part of the problem--different institutions in different areas of the state will have different needs to respond to, although there are some general needs that are universal.

The commitment must be on the part of the total structure, not just at the community college level, but also on the part of the Federal, State, and Local levels. A commitment to the student in this particular place. There must be a cooperation between the community and the institution to provide the education necessary. This demands a commitment on the part of the institution to listen to the community and respond to the community. A commitment on the part of the community itself. This commitment is assured to us through the advisory committee system. We must realize the commitment is there to be made. We are made to realize this through the people who serve in this advisory capacity.

We need a commitment on the part of the funding agency--whether it be Local, State, or Federal. I hope that commitment will eventually be to full funding of the programs. A commitment that the funds will be necessary. If the full funding is there and the funds are adequate for every type of cooperative education, that's fine. I spoke earlier of the need of this commitment on the federal level. I think many of us would hope that agencies on every level have that same commitment to and for the good of the students. I know that maybe philosophically that is there, but many of us run into problems. One problem that concerns many of us is that perhaps VA benefits are not available to a student until full accreditation is given to that institution. Granted, that does come around to the back door of these benefits, but it seems that there are some road blocks going up that do cause breakdown.

On the part of the institution, internal organization must be of such a nature as to facilitate the development and conduct of appropriate educational programs/methods. For all practical purposes, I think we must look within ourselves. Granted, we will look without for additional funding, additional guidance, etc., but first and foremost we must look within ourselves. How is our own internal communication and coordination getting the job done. If we find the commitment is not there internally, then, of course, the battle is going to be a very difficult one. The commitment then must be from the top. The commitment must be not only on the part of the administration but also on the part of faculty--total faculty hopefully. There may be many ways to go about achieving that, but in a community college we are not only an occupational education faculty or an occupational education instruction facility, but we have many goals which we are to achieve and we must achieve them together.

There would seem to be a need for some system to improve and to assure internal communication throughout. Leadership is necessary, that is true, but wherever the coordination comes from within; whether it be through the instructors, through the job development specialist, through the dean of instruction, through the president, or whoever it is, and at whatever level it comes, the commitment must be made and held at every level.

I think that what was said earlier about the necessity for local control--I guess that I am always stuck with the word control, I don't know how best to use the word--there is a need for quality control. There is a need for coordination and assistance on a broader/wider area than just the local level. Yet, the needs are best recognized at the local level. I think there is a need for options, a need for variety. I would hate to ever see a centralized system structure throughout the State where these local options would be impaired or would be hindered. One of the charts that came to us earlier in the day showed the variety of size among the Community Colleges in Colorado. We have a variety, really a two-fold type of government, governing structure, within the Community Colleges in Colorado. I hate to see anything destroy that. We at Aims enjoy the local control that we have. We feel that we can respond better to the community through the local control. I am sure the state system for community colleges finds benefits from their point of view. I think there is a place for both, I would hope that the options and the variety will remain in the state to the degree that it is practical and efficient. There may be a time when this is not practical and yet, whether the college is state or local, I would hope that everyone of the institutions will be able to respond adequately to local needs. All of the colleges are a variety of sizes and the organization will be different--in some colleges there can definitely be a group that can handle the entire program.

Finally, I would say that in the community college sector, wherever they are, I would hope that there would continue to be an improvement and enhancement of communication among institutions. To share both our successes and our failures essential for the sake of the students for articulation purposes. Not only that community colleges communicate, but that there be communication between the community and the four-year colleges. Also, there is a need for this institutional communication in order to coordinate our efforts of a political nature.

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CONFERENCE SUMMARY AND OPINIONS

George Lyons

I will speak to you from a different point of view in terms of the fact that I am a director of one of the seven independent area schools in the State of Colorado. The seven directors are known to some people as the seven bandits. Remember that the area school is strictly vocational education. One year, primarily certificate program--we do not have the academic program in the independent area school. As I sat through Session Number I, I am positive in looking over the three objectives that this group today addressed themselves to these objectives. That is pretty evident. As I listened to the comments from your task group leaders, in reading through the many pages of your notes, and in making notes of my own as I went, I would like to direct my comments to some of the local concerns that you brought out.

I would like to talk about the organization within an institution-local administration. Keep in mind that I am talking from my own frame of reference. I am a local director, I am a director of an Area Vocational School, I do not answer to a college president, I do not compete with hours with academic programs, so it may be a little bit different.

Concerned with the distribution of the work load, in a justification of a coordinator to other instructors, they don't have as great a student load and so on. Again, this ties in with finances, and with the limited funds which you talked about. Someone I was visiting with this morning asked me one question. She said, "I had a call from HEW this morning, and they asked me to get some local input on how Federal funds should be distributed in education." My answer was real quick. I said, "Let's enrich what we have and make the good better rather than go out with a lot of new programs, especially with the current financial pinch that Local School Districts are in." She thought that was well taken and I hope she takes it back. Then again, that is my opinion and you may not agree with me.

You discussed the present FTE allotment and how it works and so forth. A lot of people are discussing that. I think there is nothing so sacred about existing laws. I think if you don't like the present FTE allotment, get busy, get organized, and down the road look for a change in the FTE. Don't sit back on the defensive, take the offensive. These things can be done. I like to go on the philosophy that we operate subject to change.

Then the question came out about what is administrations part and where does it stop. That's a good question because that is organization. In my opinion, the administrators and staff must recognize that line and I think it can be recognized with good job descriptions and good programs at work. I am probably talking MBO, but it does outline it, it does make it clear, and I have found it most successful.

I have also heard and read quite a bit about the concern for decline in enrollment and how this is going to take away our students, take away our FTE. Is that really a problem? In my opinion, it's no problem. If you have quality control, you have quality programs, be they in coop or otherwise, I think you are going to have good enrollment. Again, as one legislator told me, the trouble with you people in vocational education is that you have got to get out and sell your merchandise. A quality program will help sell merchandise.

Other concerns: too many agencies and programs within a locality competing for job placement and so forth. If we look at the Boulder program next year, at the secondary level, we would have had three VE Coordinators, two ICU Coordinators, six Office Occupations Coordinators, two Coop G Coordinators, two High School Intern Exploratory Coordinators, the CETA, YMCA, and thirteen other vocational program instructors looking for placement. As a result of this, we did get something done. I think the way we got it done was by going out and bringing the world of education and the world of work closer together through communications and cooperation. The world of work, get them in and involved with the world of education and that can result in administrative commitments.

In my opinion, one of the greatest needs that we have and a remedy for our problems is all classes must work in tandem rather than at random.

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CONFERENCE SUMMARY AND OPINIONS

Bryon Graber

I am the Principal at Emily Griffith Opportunity School and I am also an Area Vocational School Director. The Opportunity School, as you know, serves the metropolitan area in several ways that are distinctly different than the ways of the other postsecondary institutions in the metro area. We are a northcentral approved high school for adults. We have a substantial adult based education program that we operate day and evening. We operate a broad range of occupational training from week long workshop kinds of training programs to two year licensing types of programs. We are not a credit or degree granting kind of institution nor do we ever end the pursuit or avenue of service.

It is a distinct pleasure for me to have been asked to come here today because I have found the conversation not only from the front of the room to be very stimulating but also from the buzz groups. I visited a number of those task froce groups and I was impressed with the caliber of work going on. I think Dr. Keller can be assured that at least the objectives for the day have been addressed with a great deal of concern and a great deal of positive production has come from that work.

As I listened to the presentations this morning, (which were extremely stimulating) the buzz sessions, and as I looked over my own perhaps pre-conceived opinions regarding this whole matter of education/work, I reduced in my own mind the problems that this workshop faces for the rest of the week to three things: funding, funding, and funding. That's not altogether true, but it's not altogether untrue either. I recognize, as all of you do, that the competition for dollars in education is becoming most difficult for all of us. We have legislators that have substantial restrictions placed on them, we have a great deal of political competition among institutions for those dollars. I see that as perhaps the key problem, not only for education/work in the State of Colorado, but for all of education. We seem to have a competition within our State agency, between postsecondary and secondary allocations. I think that can be healthy in one respect because it dictates accountability. I think it can be most unhealthy when it gets into a kind of political arena and ends in competition that can be unhealthy for all of education. I see a lot of understanding of the funding patterns, not only in the State and Federal level, I see a misunderstanding of an in-house nature between administration and staff regarding how funds are generated for the programs, how they are distributed--there is in-house competition there and I see that as the key issue that should be addressed in some detail by this conference.

I identified three problems and although they are not all funding, the do relate to funding. The second one is coordination. I have heard that many times in this room, I've heard it many times within the last 30 minutes. There are three kinds of institutions represented at this workshop. They are more or less represented by the three people you see here. Each institution has separate and perhaps different objectives. It seems to me that these should all be considered very carefully, the objectives should be identified and pulled together, so that the direction that comes out of there is to the advantage of the subject of this conference which of course is education/work.

Problem number three is organization. In order for us to have common direction, in order for us to eliminate the competition I spoke of earlier, we must have organization and proper direction. We have an agency that can provide that. That is our State Board for Community Colleges and Occupational Education. They are providing state-wide organization for us. I think we are inclined, as Paul pointed out, to establish a WE based syndrome with our own State Board and that is a very unhealthy situation. Those people are experts, they can provide the organization and the leadership that we need and we should take advantage of it.

As I look at the objectives for the remainder of the week, I am very much encouraged. They speak to the three major problems that I have identified in my mind and I see that each of these matters will be addressed in some detail and I feel quite confident that proper direction for education/work will be the result at the end of the conference.

SESSION II

January 25, 1977

Objectives:

*To review and critique a conference paper and suggest:

--alternative patterns for organizing postsecondary programs of education/work; and,

--criteria common and necessary for effective programs of education/work in postsecondary institutions.

*To discuss with one or more national leaders the need for more effective programs of education/work.

*To become aware of the new vocational education legislation and its impact on postsecondary programs of education/work.

TUESDAY EVENING

7:30	Introduction of Special Guests; General Announcements; and Session II Objectives	Dr. Louise J. Keller
7:45	CONFERENCE PAPER "Postsecondary Education/ Work Programs--A Conceptual Framework"	Ms. Anita Salazar
8:45	Wednesday Task Group Assignments	Dr. Louise J. Keller
9:00	Get Acquainted Social Red Baron Room	

Session II
Tuesday Evening, January 25, 1977

CONFERENCE PAPER: POSTSECONDARY EDUCATION/WORK PROGRAMS--A CONCEPTUAL FRAMEWORK

Anita Salazar

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INTRODUCTION

The opportunity to address you, participants of the state-wide Conference on Postsecondary Education/Work, is indeed a pleasure. As you know, Dr. Louise Keller and I are Co-Directors of the Conference. In the preparation for this Conference we were most concerned that a sincere attempt be made at the beginning of the Conference to analyze and synthesize important national developments in postsecondary education/work programs and at the end of the Conference hopefully all participants will have a perception of "what is," "what are the options," and "what can I do" as a member of the postsecondary education community in Colorado.

This morning we began by looking at "what is" or reports of education/work in Colorado. Tomorrow we are asking you to do two things. First, suggest alternative patterns for organizing postsecondary programs of education/work; and, second, suggest criteria common and necessary for effective programs of education/work in postsecondary institutions. We felt it might be helpful to give you some ideas to meet these two tasks. This evening, therefore, I wish to share with you what we perceive to be a conceptual framework for postsecondary education/work. We wish to stress at the very outset that this is a "proposed" conceptual framework--not "the" framework. Also, the ideas expressed are not original but have been taken from the literature which has emerged on the subject during the past decade and ideas have also been taken from our research in Colorado.

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I have a personal request to ask of you. Please, sit back, relax, and do not attempt to take notes, merely listen. Upon the conclusion of this formal presentation you will be given a copy of this address which hopefully will serve as a discussion instrument. We want you later to critique it and give Colorado postsecondary educators your most candid, professional judgments.

In an attempt to fashion the substance of this presentation, we began by selecting five major headings for condensing and organizing our literature/research findings. These five headings are:

1. An Overview
2. Criteria for Successful Education/Work
3. Common Functions of Education/Work Personnel
4. Alternative Organizational Patterns
5. Trends and Summary

Please note that as a "proposed" conceptual framework, we are not addressing the problems or constraints associated with planning, designing, implementing, maintaining, and evaluating such a system. We are attempting merely to establish the parameters, the structure of our discourse for this week. When people come together to discuss their concerns and operations, it is extremely important that we understand the dimensions of that discussion, rationale, terms and definitions, etc. This presentation may be viewed as "laying the groundwork" for future dialogue. Now let me move to the first major heading, "An Overview."

AN OVERVIEW

Under this heading, we will examine,

1. The need or rationale for a comprehensive system
2. Needs of the adult learner
3. Additional terms and definitions
4. Concept of a Systems Approach

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Rationale for a Comprehensive System

First, the need or rationale for a comprehensive system. When we began examining terms and definitions, we found that confusion does exist because such terms as cooperative education, work study, work exposure and work experience are defined differently across the nation. To illustrate the problem, in 1974 a technical assistance team from the Division of Vocational-Technical Education in California, found 14 titles used for cooperative education and work experience. In Colorado we found that cooperative education, work study, work exposure, and work experience are defined differently from institution to institution and even between institutional program areas.

"Education/Work Programs" is a term which describes a variety of programs where there is a definite relationship between educational programs and work experiences. Mrs. Marion R. Craft, Education Program Specialist, for the Postsecondary and Adult Occupational Programs Branch of the Division of Vocational and Technical Education, U.S. Office of Education, in a memorandum to Dr. Richard E. Carlson, Director of the Division of Vocational and Technical Education, U.S. Office of Education, recommended action on defining work experiences and identifying different types of work experience programs. In her memorandum she was striving to develop a set of definitions involving education/work programs. She recommended that the Bureau of Occupational and Adult Education use the official definition of education/work programs to be the following:

> "This is an umbrella term to describe a variety of arrangements, either paid or unpaid, whereby students are involved in real work environments. It includes the cooperative education student who is receiving financial support to continue his studies, and the work experience student who has a learning experience in a work environment."

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Work programs are used by students for varied reasons and are used in many ways. They may be used for purposes such as financial, self discovery, occupational exploration, general experience in the world of work, development of job entry skills, up-grading and for professional entry such as interns. In Marion Craft's memorandum she also presented a set of terms and definitions for education/work programs. Though her recommendations are not official U.S. Office of Education terminology, we did accept many of the terms and definitions as "working" statements for this Conference. We modified some of the categorizations in order to emphasize two important assumptions.

Our first assumption is that there is a hierarchy of work related to learning. In other words, a learner should probably not move directly into a cooperative or internship experience without first having had an opportunity to become aware and explore at a much higher level of sophistication than associated with career education programs in the elementary and secondary level. At any critical entry point into an educational enterprise, and especially for the adult learner, the individuals should be given the opportunity if they so desire to be "exposed" to a variety of education/work related activities.

Our second assumption that we have made is that there are three learning aspects of any education/work involvement: knowledge, experience, and assessment. A student should be given

the work experience in his occupational choice regardless of the length or formality of the experience; and as a result of this experience, he should be allowed to assess whether his interest in the occupation is true and serves his needs.

Based on these two assumptions and the review of the literature, we believe that there is a hierarcy of work-related learning which can be organized as to three subsystems of postsecondary education/work.

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As I explain this hierarchy, I will include the definitions of the education/work programs as we will use them for this Conference.

The hierarchy begins with the least formal program we call "work exposure." Work exposure is a limited involvement program which provides students an opportunity for formal observation of career settings and work examples. The program provides students an opportunity for structured observations of on-site situations as well as association with community employers/employees and professional trade/service organizations. For example, Emily Griffith Opportunity School in Denver has in the Business Occupations Department work exposure for students in Secretarial Science. Students are provided the opportunity to visit and work with a work model in their area of occupational interest for a period of one to five days.

Second in the hierarchy would be a Work Experience Program and a Work Study Program. "Work Experience" is an arrangement recognized by the school/college whereby students undertake employment experiences, generally paid, for a predetermined purpose. The work experience usually is not structured to meet an educational objective. The purpose of this arrangement is to allow students to achieve outcomes, generally self-determined, as an alternative to the regular school environment. "Work Study" is a school/college program designed to provide financial assistance through part-time employment with public non-profit employers. It is designed for students who require such aid in order to enter or continue their education in a vocational education program. The part-time employment may or may not be related to the students' occupational objective.

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Third and highest in the hierarchy is Cooperative Vocational Education and Cooperative Education Programs. "Cooperative Vocational Education" is an instructional process which integrates the students' occupational preparation with a work-related experience. The purpose of Cooperative Vocational Education is to prepare students for specific areas of employment. The following criteria identify this education process;

1. Institutional approval
2. Classroom instruction
3. Distinct education/work relatedness
4. Paid employment
5. Specific job focus
6. Cooperative training agreement and plan

Cooperative Education is used primarily by general/academic education and covers almost any program involving classroom study and off campus instruction. Some of these programs include:

1. field experience
2. internship programs
3. experiential work
4. university without walls

Page 7 (original copy)

Needs of the Adult Learner

Let us now look at the needs of the adult learner. The primary objective of the four types of programs in a comprehensive education/work system is to provide a variety of quality education/work related experiences needed by the learner to progress toward a career goal(s). The primary objective of the learner is to either enter the labor force upon completion of the training or complete training for upgrading. A comprehensive education/work system will provide services to students among who are:

1. Disadvantaged and low income
2. Physically handicapped
3. Slow or gifted learners
4. Ethnic minority
5. Women
6. Dropouts
7. Veterans
8. Volunteer workers

Other variables that affect the needs of learners are:

1. Age
2. Employment status
3. Day or evening school enrollment
4. Geographic locality--rural, suburb, inner city

A postsecondary institution has the responsibility, therefore, to structure a system for providing education/work related experiences and services for learners.

Page 8 (original copy)

Other Terms and Definitions

The third area under the first heading, "AN OVERVIEW," is additional terms and definitions. Other terms we have referred to that need to be defined include "postsecondary institutions" and "adult learner." Postsecondary institutions, for our purposes, are those public supported institutions which serve adult learners and are classified as:

(a) Junior/Community Colleges

(b) Area Vocational-Technical Schools

(c) Local Educational Agencies with adult vocational education programs

For the purpose of this paper and the Conference, higher education is not included in our definition of postsecondary institutions.

"Adult learner" for our purposes is any individual beyond the age of compulsory attendance who is not attending full-time public school. In Colorado this is age 16 or over. Adult learner for our purposes is used interchangeably with "postsecondary student."

Concept of a Systems Approach

The fourth area we want to discuss with you is the Concept of a Systems Approach. We begin with the realization that the terms "system" or "systems approach" have been overused today among educational "jargoneers." Even so, a systems approach allows us to comprise fragmented parts as an organized whole or system. This system is designed and structured to attain a specific purpose.

Our fragmented efforts and limited communications with each other seems to demand taking a systems approach to the conceptualization of more coordinated operations which will enable post-secondary education/work to be more responsive to human needs as well as having the potential of being more viable, visible, and dynamic. It behooves us to orchestrate our efforts in order that we be perceived by our many publics as an educational enterprise that is genuinely concerned with people and their career development needs.

Page 9 (original copy)

CRITERIA FOR SUCCESSFUL EDUCATION/WORK

Our second major heading is CRITERIA FOR SUCCESSFUL EDUCATION/WORK. In order for education/work to be successful as a system, certain elements or criteria need to exist. Some of the more important criteria as gleened from the literature include the following:

I. AN INSTITUTIONAL PHILOSOPHICAL STATEMENT IN SUPPORT OF EDUCATION/WORK. The institution's philosophical statement must be clearly stated and understood so that the mission and rationale of education/work are obvious. Fulfilling the philosophical statement then are:

   A. Administrative leadership. Administrative leadership should be committed to the philosophy of education/work and should be effective in their leadership roles. If administrative leadership and support is visible, all other criteria fall into place--assuming that budget and staffing support are provided.

   B. Curriculum. Curriculum will determine the success of the education/work system and the success of its product--the learner.

   C. Teacher/Coordinator support and leadership. Competent coordinators of education/work should be trained to implement and operationalize education/work programs. They should also be trained in working with the adult learner.

   D. Learner support and participation. In order to have learner support and participation, flexibility in institutional requirements and scheduling is important.

   E. Community Support and Participation. For our purposes the community includes private citizens, business, industry, labor, government and other employing agencies.

Page 10 (original copy)

II. CAREER GUIDANCE provides learners the opportunity to explore and develop in their field of interest. There is a working relationship with guidance, counseling, special services and other related services.

III. JOB PLACEMENT services provide for job development, exposure opportunities, short-term employment, and permanent job placement. In addition, job placement provides for:

   A. Current information about the labor market and manpower projections.

   B. Interdisciplinary cooperation among occupational studies, general studies, and other career-oriented instructional programs.

C. A related class, workshop, seminar or other group activity that is coordinated with the work experience. Such an activity provides for group and individual assessment.

D. Learning agreements and training plans when possible to insure for more meaningful learning and working activities--especially when credit is granted.

IV. INSTITUTIONAL CREDIT is granted for work experience and is recognized by four-year institutions.

V. ADVISORY COMMITTEES keep education/work programs up to date and they help keep communications on-going between the educational institution and the community.

VI. INFORMATION about the education/work system is made available to students, faculty and the community through various mediums to facilitate public relations.

Again, in listing criteria we have not taken into account problems or constraints. What we have done is "pooled together" the best ideas as taken from the literature. It is likely that not every education/work system will have all the listed criteria but a successful system will have most of them.

Page 11 (original copy)

COMMON PERSONNEL FUNCTIONS APPLICABLE TO THE FOUR TYPES OF EDUCATION/WORK

Now let's look at our third major heading COMMON PERSONNEL FUNCTIONS APPLICABLE TO THE FOUR TYPES OF EDUCATION/WORK. For our purposes, a comprehensive education/work system includes four programs:

1. Work Exposure Programs
2. Work Experience Programs
3. Work Study Programs
4. Cooperative Education Programs

We felt that it might be helpful for us to summarize for you some of the necessary and common functions performed by personnel of education/work. We arrived at the common personnel functions again through a review of the literature and through a survey mailed to personnel involved in Colorado postsecondary education/work. We asked Colorado postsecondary institutions for job descriptions of their education/work personnel. The common functions performed by personnel involved in any one of the education/work programs can be classified into three areas:

1. Programatic
2. Guidance
3. Job Placement and Coordination

Programatic functions include:

1. Keeping a systematic record of learners
2. Evaluating learners
3. Evaluating the education/work program
4. Studying legislation to (1) seek adequate funding for continued operation and improvement of the program (2) keep informed of changes in the law affecting postsecondary education/work.

Page 12 (original copy)

5. Facilitating effective public relations

6. Working with and participating on advisory committees

7. Working with state agencies

8. Attending workshops and professional meetings

9. Articulating with secondary and four-year schools

Guidance functions include:

1. Providing career development services

2. Providing labor market information

Job Placement and Coordination include:

1. Placing learners in work situations

2. Evaluating work situations

3. Locating working situations

4. Planning and managing the program

As you can see, the programatic, guidance, job placement and coordination functions are not easily separated, and we admit that a programatic function could be viewed as a guidance or job placement and coordination function. We thought, though, that perhaps it would be easier for all of us to look at common functions by grouping them in some workable fashion.

Because so many responsibilities of education/work personnel are duplicated and/or overlap, it would be advantageous to have a conscious coordination of efforts in order to develop an efficient comprehensive education/work system.

Page 13 (original copy)

ALTERNATIVE ORGANIZATIONAL PATTERNS

Our fourth major heading is ALTERNATIVE ORGANIZATIONAL PATTERNS. The organization and administration of an education/work system will vary from institution to institution. It is doubtful that one organizational pattern should be mandated to all types of postsecondary institutions. However, as a group we need to look at alternative organizational patterns along with institutional rationale to determine if there is a need for a specific organizational pattern for any particular type of postsecondary institution.

The complexity and sophistication of an education/work organizational pattern will be affected by these six factors:

1. THE COMMUNITY. Is the institution serving a rural, inner city or suburban community?

2. THE TYPE OF INSTITUTION. Is the institution a Junior/Community College, an Area Vocational Technical School or a Local Educational Agency? Is it a small, medium or large school?

3. STUDENT CHARACTERISTICS.

   a. Age
   b. Day or evening student

c. Employment status
d. Special needs--disadvantaged, low income, physically handicapped, slow learner, gifted learner, ethnic minority, women, veterans, dropouts, volunteer workers?

4. THE NUMBER AND TYPE OF EDUCATION/WORK PROGRAMS WITHIN THE INSTITUTION AND IN THE SURROUNDING COMMUNITY.

5. ADMINISTRATIVE DELIVERY AND COORDINATION.

a. Centralized administrative of education/work
b. Decentralized administration of education/work
c. A combination of centralization and decentralization of administration

6. ECONOMIC-FUNCTIONAL REALITIES OF FUNDING

Page 14 (original copy)

As part of a survey we mailed to Colorado postsecondary institutions, we asked for copies of their organizational charts. We received several organizational charts; and, as expected, no two were alike. We decided though to give you a general summary of what we found after looking through the charts. Some of the most obvious points include the following:

1. For the most part, there was a separation not only of occupational and general education, but also of job placement personnel, and career guidance personnel.

a. In some schools the job placement personnel and career guidance personnel were directly responsible to the occupational education division.

b. In some schools the job placement personnel and career guidance personnel were directly responsible to the student services division.

c. A local Educational Agency had job placement personnel responsible to the director or assistant director of vocational and adult education.

d. In some schools there was no designation for career guidance personnel.

2. The career guidance personnel were usually separate from the guidance and counseling staff. Perhaps in operation more interfacing takes place than appears in the organizational charts.

3. In only one institution did there appear in the organizational chart a position for a cooperative education coordinator responsible for almost all cooperative education in the institution.

4. In only one school did we find a coordinator of education/work in line management with administration. In this school, the Director of Cooperative Education was directly responsible to the President of the institution.

5. Financial aid offices were usually responsible for the work study program, and they were usually responsible to student services.

6. As a broad generalization, we think it is safe to say that most postsecondary institutions in Colorado have education/work programs decentralized administratively and operationally.

Page 15 (original copy)

After reviewing the literature, there seems to be a need in organizational patterns for the following:

1. A combination of centralization and decentralization. Centralization of administration to allow for accountability. Decentralization of program operations.

2. More interfacing between occupational and general education.

3. Horizontal and vertical interrelating of job placement, personnel, career guidance personnel, instructional program personnel, counseling personnel with the personnel of education/work.

From the literature we can summarize that the organizational pattern for any institution should provide for a linkage of relating services and subject matter to work experiences. Three reasons for the lack of a linkage include:

1. The conflict at many institutions between occupational and general education.

2. Weak administrative support

3. Limited understanding of education/work

Tomorrow you will be given organizational structures to critique so that you can arrive at alternative patterns of organization.

TRENDS AND SUMMARY

After reviewing the literature and visiting some postsecondary institutions in Colorado, we became aware of four overriding trends in education/work:

1. There is a trend toward more education/work programs and at a more sophisticated level.

2. Business, industry, and labor are becoming more and more interested in education/work programs.

3. There appears to be a closer cooperation between occupational and general education to develop education/work programs to better serve the needs of learners.

4. There appears to be an expanded focus of vocational education to explore the availability of no pay for work experiences in order to give learners working experiences.

Page 16 (original copy)

As we stated from the outset, the ideas expressed are not original. They have been taken from the literature and from our research in Colorado. We don't pretend to know all the answers. You are the experts, and now we need your help. We ask that you take these ideas and think about them. Tonight you will be given a copy of this presentation so that tomorrow you can give your reactions. Tomorrow morning we are asking two things of you:

FIRST, suggest alternative patterns for organizing postsecondary programs of education/work;

SECOND, suggest criteria common and necessary for effective programs of education/work in postsecondary institutions.

SESSION II (Continued)

January 26, 1977

WEDNESDAY MORNING

8:00	General Announcements	Dr. Louise J. Keller
8:15	TASK GROUPS CAUCUS	
	Task groups are organized as to interest groups. Groups A1, A2, and A3 representing Junior/Community Colleges; B1 and B2 representing Area Vocational-Technical Schools; C1 and C2 representing Local Education Agencies with adult programs; and D1 representing other groups/agencies in Colorado.	
	All groups will review and critique the conference paper presented Tuesday evening and suggest:	
	--alternate patterns for organizing postsecondary programs of education/work; and,	
	--criteria common and necessary for effective programs of education/work in postsecondary institutions.	
11:00-12:15	TASK GROUP LEADERS REPORT AND DISCUSS "HOW CAN WE PLAN, DESIGN, IMPLEMENT, AND MAINTAIN EFFECTIVE PROGRAMS AND SERVICES OF EDUCATION/WORK IN COLORADO?"	
	Moderator: Mr. Raymond Wasil	

WEDNESDAY AFTERNOON

12:15-1:30	LUNCH	
1:30	General Announcements	Dr. Louise J. Keller
	Introduction of Speaker	Dr. Bruce Broderius, Dean College of Education University of Northern Colorado
1:45	ADDRESS: "Postsecondary Education/Work Programs--Practices and Promises"	Dr. William F. Pierce Acting Commissioner U.S. Office of Education
2:45-3:15	OPEN FORUM	
3:15	Break	
4:00-5:00	"New Vocational Education Legislation"	Dr. William F. Pierce
	(Red Baron Room)	
5:00-6:00	Attitude Adjustment Hour	

Session II
Wednesday, January 26, 1977

HOW CAN WE PLAN, DESIGN, IMPLEMENT, AND MAINTAIN EFFECTIVE PROGRAMS AND SERVICES OF EDUCATION/WORK IN COLORADO

Moderator: Raymond Wasil
Task Group Leaders

We have taken the Group Task Force Leaders and asked them to present some of the responses. There is no way that we have time to cover all the responses, all of your input, all of your concerns about the ideas that may have been involved/incorporated in the paper or may not have been.

I have three things that I would like to mention in terms of what they will say and in some of the considerations you had. One, I am always fearful of the problem of turfmanship. There are three different groups working here, and I hope that a group that is presenting areas that doesn't particularly apply to your school situation that you would give them every consideration. The other thing is that even though you do represent different interest groups/interest populations, we are all concerned about one group of people and that is the students. As long as we maintain that as the focus we won't have much trouble. We are thinking about what we can do to enhance the education of these students through involvement in activities outside of the school which will provide them with a base of knowledge which they may not get any other way. Let's kick it off with the Community Colleges.

Community Colleges (Task Group A-1)

Our group started first by trying to critically analyze the paper and working with it by trying to get the conceptual framework (not the terminology or what the paper was trying to say) and how it applied to us here as Community College people or in other areas of our responsibilities. Some of the concepts that we did come up with was that there should be an agreement on terms. Some of the terms are, and again, this is more consistent with a lot of the other terms that have crept up around the state and in other workshops that we have had. The terminology could be the basis for cooperative work education programs in the State of Colorado--using this as the model. One of the things that we did go into quite in depth was the hierarchy. We talked about the work experience, work exposure, and the work study as a school/college program designed to provide financial assistance and do these fit into the total overall program when we are talking about cooperative education. There was a general consensus that the work study as it related to the financial aid did have somewhat of a conflict of interest. It fit into the program and could be worked in but really it depended upon what the outcomes were and whether or not students were using work study for credit or if it was just a work study as somebody going out coming into a financial aid program. We suggested that the work study program, Federal and State, be interpreted by the Attorney General so that the law is clear throughout the various institutions. They should all be going the same direction on it and know what we are doing. It seems as though each school administrator interprets that law quite differently.

Work Exposure should be a counseling function. Do we have a responsibility within our institution for work exploration? By the time students get to us within the community college setting, are they ready to go to work and go into a cooperative program and gain the needed experience? This assessment could possibly be set up as a counseling function as a student comes in to the institution, helping to guide their way through and then by the time they go into the actual program, it becomes more of an exposure and not an exploration program. We are assuming that a student is ready for cooperative vocational programs when they have already explored several areas of work and are ready for a specific program. Coop programs are oftentimes misunderstood. Again, it goes back to the terminology/definitions. It was suggested that in place of the title "Hierarchy Work Education," that the heading should be "Work Experience Education." Work experience being the responsibility of the actual divisional or instructional programs.

We also talked about alternative organizational patterns. The Director of Coop or Work Education should be directly under the president of the college. This could be an ideal situation--

where we are dealing with a single reporting function so that we are bringing into focus the academic areas as well as the vocational/occupational areas. There are people in the academic areas who could conceivably be put into a cooperative program. If you have it under the Dean of Occupational Studies, or Student Services, or one of the others, then it could conceivably be misconstrued and one person may not be sympathetic. Bringing it under the ideal situation would be the president or someone at that level. There should be a coordinator for both areas--both academic as well as the occupational areas or someone that would be working with those instructors.

We talked about the centralization and decentralization of programs and there seems to be a general consensus that it depends upon the institution. What best fits the needs of that institution. In a decentralization system the responsibility is primarily that of instructors. They coordinated their programs, set it up and handled it as need be. It can have some problems though. There is no real ideal alternative. Again, a lot of that is dependent upon the institution and how that institution will function. What best meets their needs, and the needs of the community. Every individual that we are serving is different. There is no ideal system--it has to be established by the institution and put into their internal organization.

Some of the common criteria are: (a) an importance of the inputs from the Advising Committee; (b) support from the labor market information; (c) quality control of the program (there has to be something to give it the professionalism that it needs and to keep it going); and, (d) trained, enthusiastic, competent coordinators. Those people who are coordinators should have a background, should have a knowledge of what they are doing. (This goes back to some of the credentialing requirements.) As we often do, because of the lack of people and lack of people who are enthusiastic, we pull somebody right in and say "OK, now you are the coordinator of a Coop Work Experience Program," their first question is "what is it?". You will find out soon enough! We have a lack of somewhat of a professionalism and enthusiasm and sometimes a lack of trained people to carry out the programs. There should be some common definitions. On Page 9 and 10 of the paper, Anita eluded to it very well, in her Criteria for Successful Education/Work. She did elude to a lot of things that are necessary--things that we need to be aware of. The administrative leadership is one of the most important because without the aid of adequate leadership oftentimes we don't have a program. If you don't have the support from the top, it just dies on the vine. All of the other things just go along with it. Adequate career guidance, job placement, and the other items institutional credit, advisory committees, and the information--I think everybody was in consensus that these are the items that are extremely important as criteria for an adequate program. The community support and the administrative support are probably the two most important because if you don't have those two, you have no program to start with.

We summarized and made some recommendations for the trends in the model. On Page 15 the word "sophisticated" should be substituted by the term "professional". Sophisticated sometimes has a tendency to be misused in the educational jargon. We're not really sure that sophisticated weapons, delivery systems, or whatever--what constitutes sophisticated. What the business and industry people and the people in the work world are looking for is a professional person, someone who goes to work on time, who understands the job, has the ability to think and to perform, and then to back out in a professional manner when the time comes. This is where the trend was--we are looking more at a professional level.

Business and Industry and Labor are becoming more interested in professional education/work programs. We are looking at what is happening--they want professionally trained people. People who are competent and if they can't find them from us in the Community College, then they will have to go to other sources to bring these people in or they are going to set up their own training programs that meet their professional needs.

There may appear to be a closer cooperation. It's still not evident. I think that in the Community College, I see it as not really being there. It is apparent, but it needs to be worked out closer and there needs to be a closer relationship between the academic and the occupational areas. Bringing them in together as far as cooperative or as far as any of the programs. Those who are in the academic areas will be looking for a job when they get out too. They need to have some work exploration and some work experience as well as the people in the occupational areas. There is a closer cooperation but it needs to be closely scrutinized.

The no-pay for work, we believe that it should be a trend but we are not sure that it really is and that this should be possibly explored closer with some legal interpretation.

Community Colleges (Task Groups A-2 and A-3)

After about an hour and a half of discussing the paper that was presented to us, we discussed many things that we felt needed to be brought out in the open among the groups.

Out of all of this information that we discussed came two important statements. The present organizational patterns that exist in Community Colleges should be maintained. The flexibility and autonomy must continue because of the differences in basic philosophies of individuals. We added to that, this statement: It should be the written policy of the community colleges that we have the flexibility to meet individual needs of students. What went into that statement were many comments. We discussed the State Board relationship to the Local Educational Agency, the Local Educational Agency relationship to the State Board, and a number of other things but we did put it into a statement that there should definitely be a written policy statement that we have the flexibility to meet the needs of that individual as we saw fit at the Local Educational Agency level. Having this autonomy and ability we felt was of primary importance and we haven't seen this as a written policy statement. We did propose that it be written. Also we discussed that many institutions (postsecondary) have many individuals who need many things that postsecondary institutions cannot provide. It was mentioned that in one particular school all you could get was an Agriculture program. All you could get. But the needs of people were other things--bricklayer, carpenter, welder, or some other type of situation. We came up with this statement: To develop interstate mobility between institutions for the benefit of the student. Cooperative Work Experience or Work Education Exposure. In other words, perhaps a means by which sending individuals that may be in one locality to another institution that has the kind of programs that the person would need. To repeat: To develop interstate mobility between institutions for the benefit of the student cooperatively as far as work experience and education work exposure.

Area Vocational-Technical Schools (Task Groups B-1 and B-2)

The paper itself we thought was very good and very well put together, however, there are a few places that we felt in the area of vocational-technical schools that there needed to be some revisions. Our feeling was that on Page 6 cooperative vocational education is cooperative education. No matter whether it is academic or . . . but there needs to be guidelines for a total training program. We discussed that to some length, and we felt that cooperative education in our definition would include both vocational and academic.

Under Number 4 where it had underlined Paid employment, we brought out the fact that in some areas of training you more or less have a slave labor in order to get a degree--for instance in the Health Occupations areas. The floor experience of the nursing person is called a laboratory experience. Is that not the same as coop experience or hands-on types of things. Therefore, we would like to add to that: "Paid employment or laboratory experiences." We then did away with the rest of the cooperative education page. Once we made that change we felt that it fit in with the paper as defined on Page 11 where it brought back the hierarchy of work exposure, work experience programs, work study programs, cooperative education programs. It was not defined there as two separate programs and so we felt that that came in line then.

Back in the Criteria for Successful Education/Work some of the people in the group involved in job placement felt that this is not a "position" but it is a "function" of the instructional program; therefore, the job placement people felt we need to capitalize the word "Services." Not to define it any further at that point. Then drop off a, b, c, and d because we felt that that was a support service of job development people. On Page 11, we put in job placement services and coordination.

We spent most of our time on discussing the paper and more or less the semantics. We had a hard time in keeping the secondary programs out of postsecondary because area vocational-technical are both secondary and postsecondary in nature. Therefore, we felt the hierarchy fit into secondary as well as postsecondary. You have to go through the same hierarchy because we deal with dropouts and we are picking up people that have not finished their education that are coming back into an experience so you still have to bring these people through work exposure and the same hierarchy as the individual that went through high school. In postsecondary we still must have the same hierarchy. How you fit the total curriculum was a big discussion as to how do you still accomplish all those things in one year. Again, that comes back to instructional designs. How do you move the individual through that experience.

Our suggestion for alternative patterns for organization was that the paper dealt more with the fact that coop and work experience programs are a function of job placement people, counseling people, and under the student services area. We felt that coop is instructional--should be under instruction and you should use those people for supportive services. And that is where the whole role is. The Dean of Instruction--this whole concept would fall under the Dean of Instruction, or whoever is responsible at that institution for the instructional programs, and that you use the Student Services people where guidance and counseling and job placement usually fall as supportive people. Needs to fall under the Department of Instruction--not under the other areas.

Local Educational Agencies with Adult Programs (Task Group C-1)

Our group was for Local Educational Agencies with an adult education emphasis. You are dealing with pretty independent people here, coming from different backgrounds. Whenever you get into the adult education world, you find a great lack of similarity of any pattern. We did a lot of chit-chatting, first of all, on some subjects within the paper and some subjects not within the paper. One of the things that came up for us, that I don't know if its a problem for everybody, if having the paid student by a manpower program and the unpaid student in the same classroom and some of the problems that develop from this. One of the conclusions that did come out of that discussion was that the work experience or the work education part of our program really does help the person that is paid to come to class receive a better goal of what he is there for and often attitudinal changes develop when they move into an education/work experience.

We talked some, on Page 6, of the cooperative training agreement and plan about how often an agreement and plan is not carried out. Sometimes because of lack of understanding of business. Sometimes because of lack of good enough supervision of the person involved in the coop program. We didn't come up with a recommendation whether or not this statement should be changed, but we somehow along the line there, have to have some good PR with business so that they know what we are trying to accomplish rather than just having students employed by them. It is a planned operation of which they are a very important part.

On Page 8, we had some discussion on the systems approach. Whether it was defined carefully or not. We extended the Statement (See Chart I and II).

CHART I

FACTORS RELATED TO A MICRO AND MACRO SYSTEM

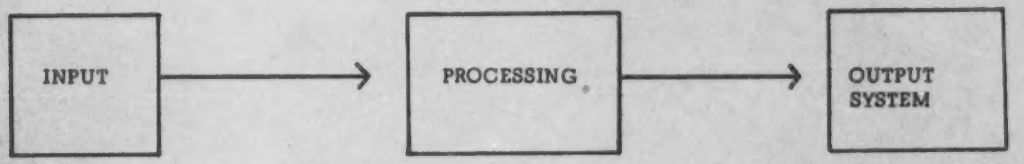
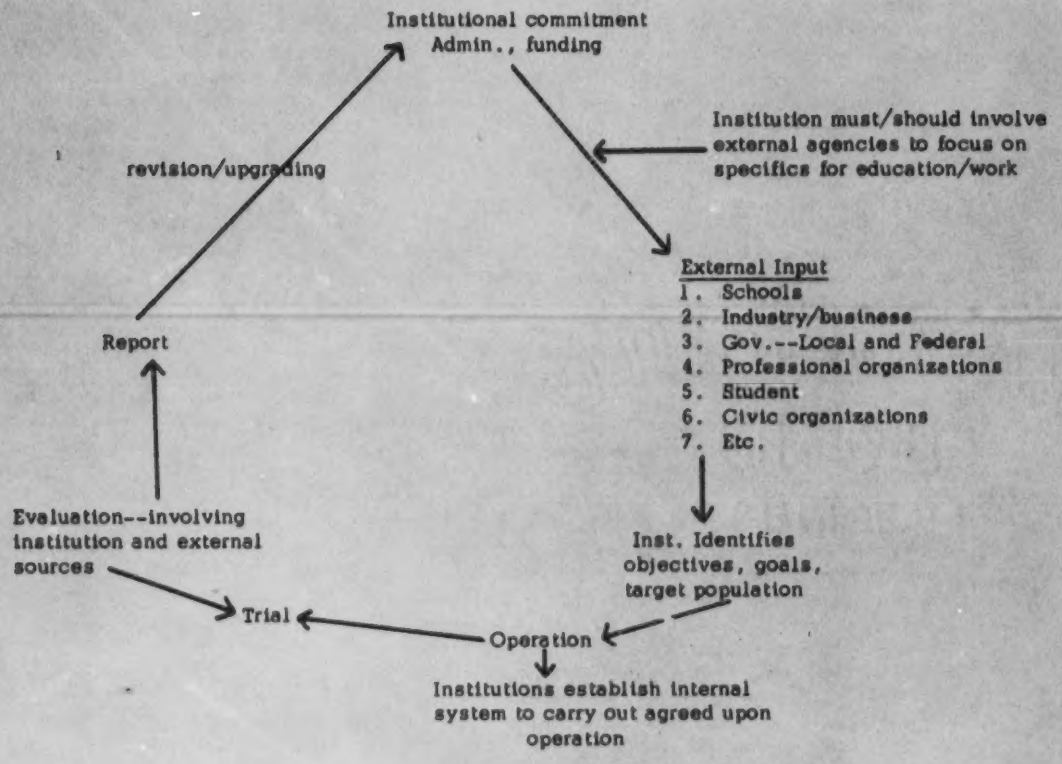


CHART II
EXAMPLE OF AN INTERNAL INPUT

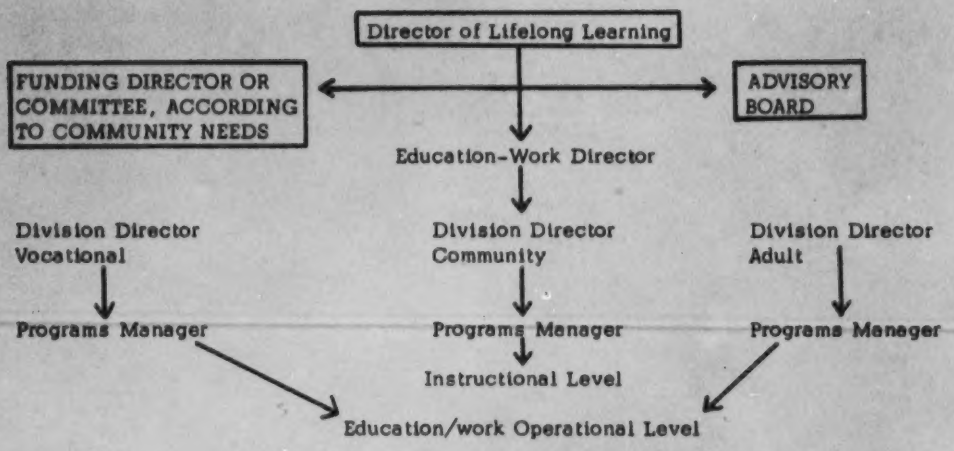


I objected a little on Page 9 too. I got the impression that this indicated we are more concerned with how we appear than what we are doing. I am sure that wasn't Anita's intent but because it does say that how we are perceived by our public--is that our main concern or is how we are perceived by our public going to be taken care of if we are doing the job that which is our genuine concern with people in their career development needs. On Page 9 at the bottom, I feel if we are going to designate how we gain learner support, you either must not designate it or don't just leave it with flexibility in the institution because that isn't going to do a thing if we are not meeting learner needs. In other words, I think somewhere in that statement you should say you are going to gain learner support by meeting their needs first of all. Flexibility within the institution should be mentioned as only a part of meeting their needs.

On Page 11, Chuck and I discussed a little after our group meeting whether or not we were covering follow-up and follow-through in our programmatic function. If it is assumed as a part of evaluation in the education/work program or could it be a separate function. Because it was not discussed in the group, we throw this out as a question.

We really liked the centralized/decentralized portion of it and we came up with an organizational pattern that is both centralized and decentralized. We will now share this with you.

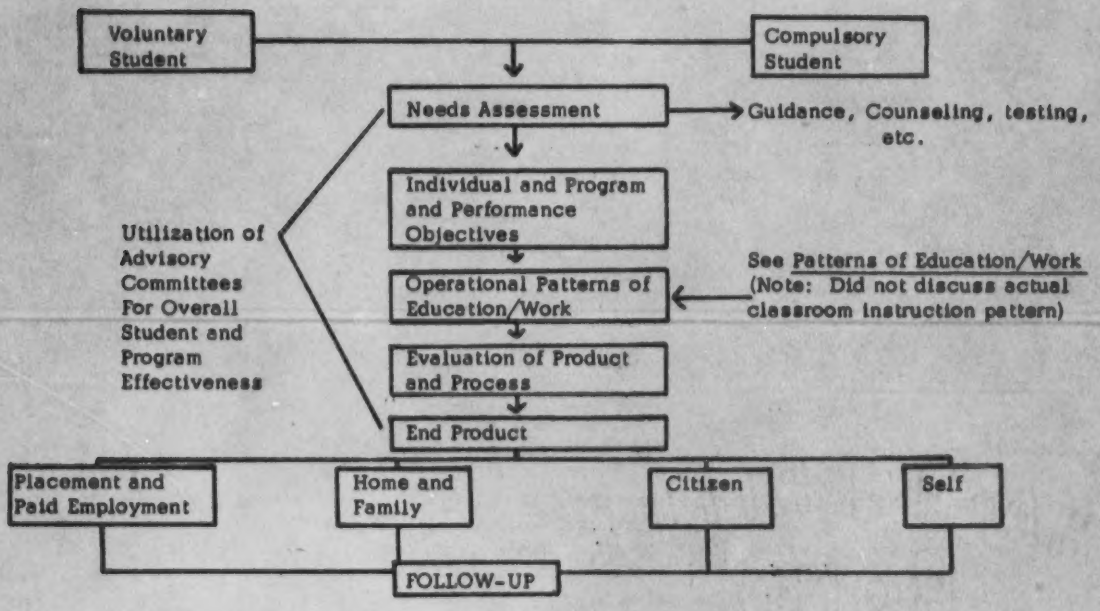
CHART III
LIFELONG EDUCATION



We are starting out at the local level with the Director of Lifelong Learning. Under him we go directly to the Educational Work Director. Then under the Director of Lifelong Learning we branch into three branches: A divisional director of vocational education; a divisional director of adult education, and a divisional director of community education. With program managers under each of them and then branching off to a decentralization at the instructional level. What we like about the educational/work director up at the top, is that all three branches, the vocational, community, and adult could all tap him or her, as the case might be, for services. We would have a Funding Director and a Community Needs or a Community Resources or a Funding either a committee or a person working with the Director of Lifelong Learning because we realize there might be some problem in funding all of the programs. The Advisory Board will be at the top also. TC-2 leader will go into how we operationalize some of it.

One of the problems, and we think that other people have the same problems, we turned on the central umbrella outlook especially in adult education kinds of agencies. We have people who are in our group dealing with CETA and WIN and the problem is in separating who's who and identifying the students who are in those programs because different students who are in your program first of all, may have been paid to take their place there. Some are there on the voluntary basis. The question is, if a different student is on a paid kind of program WIN, CETA or whatever, you may have to deal with that student differently as far as a work education program. The classic example probably would be if the student was a veteran, and you put him out in a cooperative program. In essence, the program or the cooperative kind of experience you gave him may be a little different than another student who may be in your program who may fall under CETA guidelines. That is why we looked at an Education/Work Director to try to filter out/separate some of this information. We had some people in our group who had students in their program on CETA who had never been identified to them as paid students in that classroom, or non-paid and this provided in some instances a problem with motivation. There seemed to be different motivations for that student taking up a chair in that classroom. We hope that in administrative structure--you will see a little bit clearer in the proceeding notes that come out later why we did this. Also, we separated them in the divisions of vocational, community, and adult because we looked at the micro system first. We don't think we are going to change at this point the micro or all those outside agencies that have impact. So we better have our own funding officer or committee (Community Resource Committee) that can figure out and consolidate this group and then give them to each of the Division Directors, if you will. At that point we want the program managers and the instructors of the program, and of course, finally, we get to the students. Again at our level, we talk about two different kinds of students basically. The voluntary and the compulsory. (See Chart IV) The compulsory in essence are those students who are paid to take up a seat in your classroom or in your work program. The voluntary students are those who are there for different reasons, at least at the beginning. They are there on their own and that provides a different motivation for being there other than someone is paying you to. The one thing that came out in our group that regardless of whether you are voluntary or compulsory, once a work experience pattern began, all students seem to move at quite a different level as far as motivation.

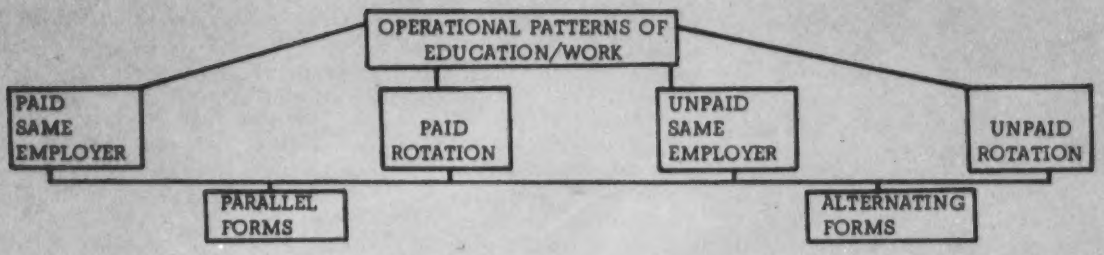
CHART IV
FOLLOW-UP ASSESSMENT



Motivation became stable at a very high point once they finally find out that they were going to get out there and work. Regardless of what their classroom situation is--whether they were voluntary or compulsory. We saw that the work education part of the program was the most stimulating and motivating for the students. That is why we have pretty much directed some of our patterns at only work education and not the instructional part of the program. As we flow the student along, first of all taking a look at needs assessment, this would include guidance, counseling functions. We move then to--once we do have a needs assessment (this would take place in each one of the divisions whether you are designated in the adult, vocational, or community education group). Basically there would be a plan, an individualized program, and performance objectives would be established. At that point, assuming a coincidental instructional program that would be related, which we did not specify, we talked about operational patterns of education/work. They are in multitude. We were reluctant to really get down and evaluate whether something is cooperative, work experience, work exposure, or work study. It was the work itself that was important--forget about the label. Basically the only labels we attached were paid and unpaid. There has to be that feedback loop as far as evaluation of the product and the process. We did kind of work backwards to begin with--we decided what the end product should be as far as the student regardless of how he got into the program. The number one end product priorities were placement and employment, home and family, citizen and self. If you could accomplish those goals through the education/work patterns that were established then we felt that you have done your job.

There was an interesting situation reported where students enrolled in a cooperative education program talked with some people who had been in a non-paid internship program. One was paid (the cooperative) and one was unpaid (internship) and I guess through this informal investigation many of the cooperative students/paid students wished they had been on the non-paid because they felt those people got better and more varied experiences which we thought was quite interesting when we began looking at the paid unpaid issue and the obligation attached to the employer or the person providing the experience. (See Chart V) Some of the patterns include and there are multiples of these (combinations): paid experience with the same employer; a paid experience rotating through a number of different employers based on the fact that they may only be able to provide limited skills within a particular business. You have different employers with different needs--you might actually rotate a group of students through a number of different employers to give them a varied experience. You can do all of this, of course, on an unpaid basis at the same time. All those can be combined with what we have called the alternating and parallel kinds of programs. You can also get all the terminology and can set up any combination based on the needs assessment and the program

CHART V
PATTERNS OF EDUCATION/WORK



and performance objectives of that individual student. What is sometimes at issue is, are unpaid students getting better experiences and exposures than paid students. That is an issue that has to be resolved. Basically it is resolved by the commitment of individual people in the community as well as the teachers, coordinators, and program managers.

Other Colorado Groups/Agencies (Task Group D-1)

We started out going through each page of the presentation and these are just a couple of pages I would like to refer you to. On Page 6, with the paid and unpaid employment, we did put examples health occupations would be in that category. We also added a seventh category, Coop Coordinator, because we felt that it was imperative to have coordinators for all these programs.

On Page 7, the last sentence of the first paragraph, Number 7 says that ". . . the education/work system will provide services to all students among whom the following are included: . . ." We felt that this little list of eight eliminated the average, normal, everyday student and just picked out the disadvantaged, etc., and so we thought we should include all of us.

On Page 8, we just put in parenthesis. A, B, and C, consider certain areas, but we also thought other agencies and/or schools should also be considered in this category. It was pretty much limited to Community Colleges and Area Vocational Schools--there are other proprietary schools, etc.

As far as suggestions for alternative patterns, we sort of hashed that back and forth, and we came up with the Dean of Instruction to head the programs and having a straight line to the president, a career education coordinator, programs based on guidance and counseling and who would be the individuals to go out into the business and industry areas so that the work people coming from all sides attacking one particular business area. We found that this was sort of a magnanimous problem--it is an impossible situation to coordinate it all state-wide. Then we suggested coordination by area, and we decided on the geographic area. We thought that other alternatives would be to look at how the state board was divided and resource groups from CETA and they all have things divided into areas--could see if any of those particular practices would work as far as an area division.

We had talked about developing a council of coop coordinators. We suggested that maybe this council would be directly accountable to the president. We figured on some programs that would work if there weren't too many programs. If it is a large school with a lot of programs, we were afraid they may run into problems.

We also talked about the federal guidelines and the institutional guidelines, etc. We came up with a systems thing. The internal input. We started off with the institutional commitment. We have to have administrative commitment and funding commitment. They would identify what their limitations would be. Then we felt that it was imperative that the institution involve the external agencies to focus on specifics for the education/work process. We listed a few of the external inputs as being outside schools, industry and business, government (both local and federal), professional organizations, civic organizations, etc. From that we come back into the institution with that input and define objective goals and the target population that we needed to work with. Then you put this whole thing into operation and instead of trying to break it down , and having a specific administrative structure common to all postsecondary institutions, we felt that there were too many varieties of plans and processes in Colorado--we thought we would leave that up to the individual institution. We didn't feel that they should be dictated to.

Then we moved on to the evaluation. Evaluation involving both the institution and the external agencies so that we could see if the output/product was accomplishing what our original objective and goals were setting to do. There would be reporting on that and revision and upgrading. I am sure every program needs revision and as occupations change there needs to be upgrading on those. It is sort of a continuous cycle of process.

From there we moved to the criteria. As a group we accepted it pretty much as it was stated. We did have some additions. On Page 9, in the last sentence--they should also be trained in working with the adult learner for pertinent occupational experience. We really felt that it was imperative for the teacher-coordinator to know what's going on in industry--it's pretty easy to get into the classroom without skill update or whatever.

Letter B, on Page 10, we thought it should include service organizations. Number 3, Job Placement, a, we also included current information about the labor market and manpower projections, employment practices and work study. Letter C, the last sentence, such an activity provides for group and individual assesment to include pre-employment and job survival skills. We didn't see anywhere along the way where that has been included. Six, instead of putting public relations, put public understanding and support.

Mr. Wasil

I am going to impose on the task group leaders for one other thing: I'd like to have each one of you consider this question. Think of one thing that can be done right now to improve education/work programs.

A-1 Leader:

Effective in-service training. We need trained, enthusiastic coordinators.

B-1 and B-2 Leader:

Management of existing personnel to well-defined roles.

C-1 Leader:

Coordination of effort so everybody isn't hitting that same businessman for that job training. More of a coordinated effort so all of the people who are working with the same approach are working together.

D-1 Leader:

Communications. I think that there are a lot of things happening within the institution. People are not even talking to each other. I think it goes right along with everything else that would be coordination and service training and all forms of communication. In this group alone, we have no idea of what everybody is doing, and I think it has been most informative in that way.

A-3 Leader:

The establishment of work programs. I don't think we have a state-wide work program effort. We have isolated programs. Once they are established, I think they have to be established in a centralized method so that we have the administrative support and we aren't attacking the businesses from all fronts. I personally feel that needs to be in a centralized approach in some way so that we have the coordination of the total program.

A-2 Leader:

I was reminded of one of our group members this morning and she said, "Maybe it's time we turned that organizational chart upside down." And what usually comes at the bottom is the students. Maybe we ought to turn that upside down.

I think we ought to be more involved with business and industry in these workshops. We should have them here talking with us. We also need more participation from the in-service group.

Questions and Answers:

Q: I'd like to ask A-2 to talk about what we talked about on the first assumption in the paper.

A: If you turn to Page 4, the first sentence of the second paragraph reads, "our first assumption is that there is a hierarchy of work related to learning." Then you turn to Page 5, the third sentence, the second paragraph reads, "the work experience usually is not structured to meet an educational objective." We found that that was sort of in conflict with the initial assumption so we inserted the word "normally" is a hierarchy. All work experience is not generally related to an educational objective. We felt that that would qualify it.

Q: Again, on Page 4, based on those comments, something that came out in our group was that maybe it should be more than just knowledge, experience, and assessment. Maybe knowledge, experience, and attitudes because we certainly saw a difference in. . . It's more than just the experience and the knowledge of skills and there seemed to be a tremendous attitudinal change based on finally getting to the work place.

Q: There is something that this paper addresses itself to that I think should be discussed, and that is on Page 10, number 4. We discussed this in our group and we really didn't come to any conclusions about it. It says, "Institutional credit is granted for work experience and is recognized by four-year institutions. The thing we have to ask ourselves is, is this paper dealing with realities or dealing with ideals and if it is dealing with ideals, then what we are asking for in this position paper is standardized testing of life experiences for credit. Is that what we really want? On the other hand, am I able to say to a student that comes to me, "I am giving you X number of hours of credit for your life experiences." Would that be accepted by a four-year institution. Does anyone know of a four-year college that does.

A: Mesa. So you have got a base, a precedent established for the acceptance of it.

Q: Were you thinking of making this as a recommendation?

A: I think that credit should be given for life experiences.

Q: But that's an opinion. Who is to say that another institution that a student may be transferring to will accept that on the basis of my opinion. Or that it may be acceptable in this state but not in another state. By that statement are we asking for standardized state-wide testing of life experiences?

Q: The interpretation of work experience, are you thinking of an aspect of work experience as an umbrella, or any type of work experience, or is it just open for discussion.

A: We were thinking more in terms of an umbrella concept, but again, all of this is open for discussion. So, we are saying any type of work experience the person may have had, then the university or whatever institution, would have to determine whether that experience justifies giving credit for it. And you are saying, are we talking about this being a standard type of thing.

A: I don't think it could be because we come back to one of the statements that was made about each university meeting the particular needs of its population.

Q: What if we are talking about a state-wide concept of cooperative education? The range of experience of students that come into postsecondary programs is phenomenal. Is it fair for a person that has ten years of experience in an occupation to not be given credit for that life experience. If we do give him credit, how do we make it transferrable to another institution?

A: We do quite a bit of it at AIMS through a challenge system. Somebody that has the experience can challenge the course and take it. Not in all cases can we get that examination down right to the measure of what you are trying for. But the challenge works for us and then it will transfer

on because you are getting credit in an accepted course. In Mesa we can allow up to 45 hours of credit for work experience, but even some people within the institution don't feel that this is the thing to do. A few years from now we may not be doing it. I've known of institutions that just add a few additional quarters to the requirement for graduation in that particular program and then give credit which sort of is getting around it, but it does solve the problem. It really has no effect.

Q: They would be given the credit hours, for instance, if they came from AIMS to UNC when you came right down to it, it would all be elective hours and our students need very few in some programs; so you would be given credit for it but in essence it wouldn't do any good as far as your "degree" program.

A: But it would require those people who did not have that experience to acquire it through the elective hours. So you are still meeting the same need in terms of making sure that they have some life experiences in work.

Wasil

I think we've got to look at the needs of the student. First of all, if we're offering an occupational program, and we can justify giving a student credit for his past occupational experience in order to give him that occupational degree, this is ok for a two year institution. I think that we should be very careful not to destroy the students' possibility of transfer credit by giving him life experiences at our institution if the four-year school wants to do it and his goal is a baccalaureate degree, let them do it. Also, I think this may destroy some of the quality that we should try to maintain in cooperative education to give credit for the experience that takes place at this time with institutional faculty coordination, encouragement and evaluation of learning. I would say it's possible in occupational programs, but I'd not want to go with the academic side at least to give credit for past experiences on the two year college level.

I just wanted to respond. The example the gentleman used was an occupational program. First and foremost in all occupational programs is the objective to place that person in a work situation rather than a transfer situation. We are talking about a two year institution and the work experience can apply to the occupational goal that individual has. Then, I think we can give credit for work experience. We should dead-end people from transfer, but we should also keep number one in hand/in mind, that that person has to go to work and that's why he or she is in school. If the credits will meet that individuals occupational goals, then credit should be given and we should not necessarily be real concerned about if he is going to lose them or not lose them if he transfers on.

Q: How about if we state in the paper that "work experience may be recognized by the four-year institution"?

A: May be recognized but one of the cautions within the institution is that we have the mechanisms available--the challenge, work experience, occupational and academic areas. Oftentimes though, we tell the student that this is going to transfer without really researching it out. When the elective hours transfer in they are going to have to take it upon themselves to check with the institution or know what institution we are relating to. What we are talking about is the student who comes to a two year institution for education and once he/she is there, may decide to go on to four years, in which case the four year institution will not give full credit for all those courses. Believe me, this is universal across the country. And that is something that the person has to live with if they want to go ahead and go for a four year degree. It is not unique to this state.

I agree with that statement, but then we shouldn't be telling them. . . Every day I see a lot of instructors and a lot of administrators telling students (and a lot of counselors) telling these students that everything is going to go because you have a number by it or there are hours on your transcript. That is something we have to be extremely careful about when we do counsel and advise some of our students that have decided to transfer on.

Anita Salazar

I would like to thank Mr. Wasil and the Task Group Leaders, and all of you, for your excellent input into this paper. I appreciate your help, and all of your suggestions will go into our final proceedings. Thank you.

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Session II
Wednesday, January 26, 1977

INTRODUCTION OF SPEAKER--Dr. William F. Pierce

Robert Johnson

Dr. Johnson divided his introduction of the speaker, Dr. William F. Pierce, into two parts, an informal part to show him sincere appreciation for being present, and a formal aspect that is more typical of the kind of introduction due to the office he holds.

Dr. Pierce is from Oregon. He has attended the Mid-Year Education Conference and other occasions here in Colorado. He attended Riverside Community College in California, where he received the Associate of Arts Degree. From the University of California he received the B.S. and Master of Education. Dr. Pierce has his Ph.D. from Michigan State University.

Professionally, he has taught secondary schools in California for three years: he was an instructor and an assistant coordinator of student teaching so he knows something about our business. With the Michigan Department of Education, from 1964-1973, he served in several capacities: including his role as State Director in Vocational Education. He also served as Deputy State Superintendant of Public Instruction, now with the U.S. Office of Education. Since 1973, he is First Deputy Commissioner of Occupational and Adult Education. Since July, he has served in an interesting capacity: alternating between U.S. Commissioner of Education and Acting Executive Deputy Commissioner.

Session II
Wednesday, January 26, 1977

POSTSECONDARY EDUCATION/WORK PROGRAMS--
PRACTICES AND PROMISES

Dr. William F. Pierce

Ladies and gentlemen, I appreciate the invitation from Dr. Louise Keller to join you today while you consider both the advantages and disadvantages of postsecondary education/work programs.

I mention disadvantages of such programs because, like any educational strategy we consider, it undoubtedly has certain inherent disadvantages, as well as advantages, when compared to the strategy, procedure, or technique it replaces. It is not only honest, but educationally necessary to deal with both sides of the issue. Consequently, during the course of my remarks, I will allude to, reference, or in other ways acknowledge what some people view as the disadvantages of postsecondary education/work programs.

But I appreciate the opportunity of being with you so that I may attempt to convince those of you who may need it, that the advantages of education/work programs to the postsecondary institutions, the student, and the community so far outweigh their disadvantages that they relegate those disadvantages to the status of harmless irritants!

At the onset, I wish to commend the program planners for putting these programs in their proper perspective. Far too often when disucssing programs which combine educational experiences with work experience we refer to them as work and education programs. I'm pleased to see you have consistantly referred to them as education/work programs. The emphasis on education rather than on work and on work experiences as a meaningful part of our educational experiences is, in my view, especially appropriate.

Before beginning my discussion of education/work programs, I wish to observe that I have already been so bold as to inflict upon you two of my own perceptions. First, the relative unimportance of the disadvantages of such programs, and second, the need to stress education rather than work. My purpose for sharing those observations with you is simply to recognize them. First, throughout this speech I will be presenting my views, my opinions, my perceptions of the educational world as viewed from my particular vantage point. And second, that I am acutely aware that we live in a world of perception and what one person perceives as truth another may perceive as fantasy.

I turn to no less astute observers of the American scene than Lucy, Linus, and Charlie Brown to make my point. One day the three of them were looking at the sky, and Lucy said: "If you use your imagination, you can see lots of things in the cloud formations. What do you think you see, Linus?"

"Well," Linus said, "the clouds up there look to me like the map of British Honduras in the Caribbean, and that cloud formation up there looks like, or at least a little like, the profile of Thomas Eakins, the famous sculptor, and over there, that group of clouds gives me the impression of the stoning of Saint Stephen. I can see the Apostle Paul standing there to one side."

Lucy responded, "uh-huh, that's very good. What do <u>you</u> see in the clouds, Charlie Brown?"

"Well," Charlie Brown replied, "I was going to say I saw a duck and a horse, but I changed my mind."

Having established that our perceptions of both the problems and the solutions may vary, I'd like to ask you to think with me this afternoon about several social and educational issues which I will not pretend can be solved by more education/work programs, but which I do contend can be partially resolved by that educational technique. In my position as Deputy Commissioner for Occupational and Adult Education, I deal daily with programs for secondary as well as postsecondary students. I would be remiss if I didn't add a dimension to my remarks that was not a part of my assignment this afternoon. And that is the importance of education/work programs to junior high school and high school students, as well as to postsecondary students.

The various forms of media which surrounds us is replete with attacks on the attitudes, values, morals, and work habits of our citizens and, more specifically, our youth. As we begin our third century as a Nation, we find ourselves engaged in a great deal of introspection; and what we find both thrills and disturbs us. And, most often, those things which disturb us are laid squarely on the doorstep of this Nation's education system. For example:

--The unemployment rate for youth, ages 16-19, stands at 21.1 percent. Lack of skill training during the high school years is often cited as the cause.

--One-third of those who start college will never finish. That is often credited to poor motivation, inappropriate and uninteresting course work, and a lack of direction caused by poor career counseling at the postsecondary level.

--Some high schools have a larger dropout class than they do a graduation class. Clearly, the education being offered these young people is not meeting their needs. The call for relevant education is seldom heard any longer. We've gotten tired of the term and, perhaps, even a little embarrassed by it. But the need for more relevance is just as strong as it ever was.

--We are disturbed by the fact that youth do not show respect for either their elders or their traditions and the public schools are asked to at least share the blame for that because, according to some, they have not enforced discipline, no longer teach values, and have abolished all reference to religious training.

--Half the freshman admitted to the University of California in 1974 were required to take a remedial English course.

--One-third of the recent applicants to the University of Wisconsin School of Journalism could not meet the minimum requirements in spelling, grammar, word usage, and punctuation. These facts disturb us and again the fault is often laid at the doorstep of the Nations secondary schools.

These are only a few of the indicators of serious trouble in our education system to which people have been addressing themselves for the last few years. Such concerns have led to a number of studies over the last two or three years, all of which agree upon the need for educational reform. Five such studies, American Youth in the Mid-Seventies, by the National Association of Secondary School Principals; Youth; Transition to Adulthood, by the President's Science Advisory Committee; The Reform of Secondary Education, by the National Commission on the Reform of Secondary Education; and the Report of the National Panel on High Schools and Adolescent Education and the Greening of the High School, by the Institute for the Development of Educational Activities/Educational Facilities Labs--all were unanimous in urging that high schools:

--Dejuvenilize the whole operation. Drop the 8:00 a.m. to 3:00 p.m. custodial function. We know that strictly academic subjects occupy only part of the school day. Today's students won't tolerate being trapped in meaningless activity the rest of the day.

--Develop more work-study arrangements with local business and nonprofit organizations to broaden student awareness of the adult world.

--Provide more opportunities, plus credit toward graduation, for students to work as volunteers in hospitals, day-care centers, government agencies, and the like.

--Offer greater flexibility in class scheduling so that students can spend part of the school day in a museum, or attending a concert, or sketching in the park, or engaging in other intellectually stimulating activities.

--Reduce the age isolation and cultural isolation of students by giving them opportunities to meet people of all ages and cultural backgrounds--in school and out. Bring in artists, artisans, business and professional people to work with students. Let students visit these people in their own working environment.

The adjustments in the education system, which these studies suggest must be made, seem to me to be very compatible with the philosophy and the process of education/work programs.

I warned you that I was going to ask you to think about education/work programs as a viable alternative for high school students. You will have noticed, I'm sure, that the studies just cited all concern themselves with secondary education. Recent studies don't spare postsecondary education from analysis or criticism either.

For example, in a survey by the College Entrance Board, it was discovered that 79 percent of all college students surveyed said that their most difficult task was in deciding what they want "to do" after leaving the institution. More disheartening, for me at least, is the fact that 71 percent of those same students did not know where to go to get help in answering that question.

In another example, the recently released "Report on Higher Education" points out that:

> With the exception of summer jobs, most young people in college have no firsthand knowledge of any occupation save that of being a student. A great deal of student concern about the relevance of their education can be attributed to their isolation. Many, perhaps most, students lack the experience and sense of adult roles that would help them to see how courses can be relevant.

A perfect example of the result, at the collegiate level, of that isolation is reflected in the following quote which, in my opinion, represents one of the greatest wastes of human and financial resources that faces this nation. The quote is taken from a publication of one of this country's largest universities, and reads:

> While a 1973 English major tends bar in a local nightspot, a social work graduate labors in a steel mill. A math major washes dishes in Florida, an Education graduate works as a bank teller and a Psychology major serves cocktails in Maine.
>
> These actual post-college career calamities are just what students in a recently formed class want to avoid. The class, "Career Planning and Academic Programming," aims to inform students of career options and job market trends so they won't end up unemployed or underemployed like some of their predecessors.

Unfortunately, that sad tale of waste is repeated over and over again in colleges and universities across this country. Thousands of college students find themselves in the same situation. And when we add the numbers of high school graduates and dropouts who are forced to take jobs as equally unrelated to their education and training, the numbers swell to the tens of thousands. And until we begin to make the need for a close relationship between education and work a national policy which undergirds the educational experience of every student, we will continue to be faced with such incredible waste of this country's most precious resource, its people.

What does all of that have to do with education/work programs? Quite a lot, I think. I promised you I would not ascribe more to such programs than they either deserve or could logically produce. But several constants seem to emerge from all the discussions about the ills of American Education on the one hand, and all the studies which suggest solutions on the other. These constants are:

1. Young people and their parents assume that one goal of education is to prepare the student to find a job when he or she leaves the formal education system.

2. For the majority of students, one of the greatest contributors to a satisfying life is finding an appropriate job.

3. Many, if not most students have insufficient information or firsthand knowledge about the labor market to make educational choices which prepare them properly for later occupational choices.

4. Most studies assume or recommend that the solution to these problems will require vastly greater involvement in the educational process by business and industry.

It seems obvious that education/work programs do address themselves very specifically to each of those constants. It should be just as obvious that the lack of labor market knowledge by college students would have been greatly reduced if those same students had had the same kinds of meaningful work experiences as high school students. And apparently there are more opportunities for meaningful work experiences than some of us seem to think, and then this "Report on Higher Education" I referred to earlier, suggested. There are currently 7,760,000 seventh and eighth graders enrolled in junior high and middle schools. High school enrollments stand at 14,242,000 students, while our two and four year colleges and universities enroll another 9,000,000 students. Consequently, there are approximately 31,000,000 students (grades 7-16) who conceivably could take advantage of some type of program offering work opportunities.

Reliable figures regarding the number of students who are actually engaged in work experience are unobtainable. However, some fairly accurate estimates, based upon samples of students in various studies, indicate that as many as 50 percent of all students (grades 7-16) are engaged in some type of paid or nonpaid work experience program. It is estimated, however, that as little as 13.5 percent of those students are engaged in jobs which are related to their educational programs. In terms of numbers, about 15 1/2 million students work at something but only about 2 1/2 million are engaged in a program which relates their work experience to their educational program. This includes the approximately 180,000 students enrolled in college cooperative education programs.

In addition to the 180,000 college coop students, there are several other programs at both the secondary as well as the postsecondary level, both paid and unpaid, which account for a part of those 15 1/2 million working students.

College work-study, which differs from cooperative education in that it is primarily a student aid rather than an educational program, currently provides employment for about 620,000 college students. It is estimated that 25 percent of those students work at jobs which are directly related to their educational program.

In addition, some college students participate in other federally supported social service programs. For example, the "University Year for Action" under VISTA enrolls 1,380 college students. Finally, at the postsecondary level, many thousands of students participate in nonpaid, strictly voluntary work experience, either as a service to someone or as a way to gain practical knowledge about what happens in a particular vocation or profession.

Secondary students can find work experience in one of the following programs:

--Vocational Cooperative Education programs under Part B of the Vocational Education Act of 1968. Over 340,000 students are enrolled in this program.

--Part G of that same Act made Cooperative Education available for disadvantaged students. There were over 140,000 young people in this program during 1974.

--Part H--The secondary vocational education student aid program provided work-study experience for over 43,000 students during the last fiscal year.

--About 550,000 secondary students are enrolled in these federally supported programs but, given a total secondary enrollment of about 8 1/2 million in vocational education, only about 6 percent are found in cooperative education and work experience programs and only about 4 1/2 percent in secondary cooperative education programs.

Like their postsecondary colleagues, many additional thousands of secondary students join, on a voluntary basis, other types of nonfederally supported cooperative or work experience programs. Many secondary schools are currently developing and implementing nonpaid, nonfederally supported work experience programs which are designed to provide the students with educational and occupational experience not obtainable in the traditional classroom. Most students in these programs are considered nonvocational.

The central point of this discussion is that there seems to be an incredible amount of student energy going into some type of work experience. If we could but redirect much more of that energy into activities which relate the students' work to the students' education program we could, it would seem, drastically reduce the level of isolation from the labor market and assist students in making more enlightened choices.

Current studies and stated student attitudes, coupled with current student working habits lead me to believe that increased education/work programs at the secondary and college level are both feasible and desireable.

If my conclusions have not been too badly drawn, I can summarize what I have said to this point by saying the educational system needs changing, students are asking for changes, and education/work programs are able to provide at least some of the desired results.

Education/work programs clearly provide something very valuable to the student. What's in it for private sector employers? Many who have participated know that coop students or students who participate in other education/work programs often remain with the business or industry as a well-trained, company-oriented full-time employee. Business and industrial leaders usually find graduates of such programs much more mature and much more realistic in their attitudes toward the free enterprise system. An additional advantage of education/work programs is that they give the industrialist a special opportunity to respond to the need for affirmative action regarding minority and female employees.

These are but a few of the most obvious advantages to business and industrial leaders of education/work programs. The fact that 2,300 employers participate in a college coop program at one university suggests that they are motivated by something more than a desire to assist the university. After all, when as conservative an employer as mine--the Federal Government--provides slots for 7,500 students--and is indeed the largest single cooperative education employer in the country--you've got to believe there are very positive benefits to the employer associated with education/work programs.

Assuming you accept my assessment of the value of postsecondary education/work programs for both students and private sector employers, you might well ask why, out of 9,000,000 college students only 180,000 or 2 percent, are enrolled in the college cooperative education program, for example, after 70 years of effort. Quite obviously there are some problems and some limiting factors to the expansion of education/work programs. These can be characterized as follows:

1. Too few training limitations sites in the private sector. Most education/work programs must have private sector sponsors , and that requires a commitment from business and industry. Based upon what we know are the advantages which accrue to you, the businessman by nature of participating in their programs that commitment can really be viewed as an investment in their business.

2. There are still a large number of educators who view the activities associated with an education/work program as an unwanted intrusion into their comfortable teaching style. The following quote referring to college coop programs is illustrative: "For all its success, cooperative education still faces problems. . . For example, some faculty members are disturbed by the 'contaminating' influence of the outside world on their superior students, who may be attracted to the pursuit of lucrative careers rather than to graduate study."

I'm sorry, but I for one have very little patience with that argument. Those educators seem to have lost sight of the fact that they are supposed to be preparing their students for the outside world--not protecting them from it. Unfortunately, too many teachers, both secondary and postsecondary, are committed to their academic discipline, not to the students they teach. Therefore, they educate for the sake of education, not for the sake of the students needs in the real world.

3. The current high unemployment rate certainly contributes to the problem. Employers are reluctant to provide jobs to students enrolled in education/work programs when they are, at the same time, forced to reduce their permanent labor force. This condition is, of course, temporary but it still contributes to the problem.

4. Some students view the work sequence of such programs as simply an unwanted interruption in their "learning" experience. Admittedly, something like coop education is not for everyone. Unfortunately, those students have come to believe what too many educators have for too long professed--that real learning can only take place in a traditional classroom setting.

5. Insofar as Federal funds are a limiting factor, this must also be viewed as a problem. Using college coop once again as the example we find that, although the total authorization has been allocated for the last two years, to increase the college cooperative education enrollment to even 10 percent of the college and university enrollment, assuming federal money were the only limiting factor, would require at a minimum an additional $45 million: Given a federal budget deficit in the neighborhood of $60 billion and given the fact that the federal government already is investing over 1.2 billion in fiscal year 1977 in the Basic Opportunity Grant program, additional federal funds for cooperative education are not too likely in the near future.

The question before us then is, "How can we overcome these barriers to the expansion of education/work programs?" There are, I'm sure, many ways which either have or will be discussed by experts in education/work programs during the course of this conference. I do not pretend to have all the answers. A recently completed study, by the College Entrance Examination Board, entitled Bridging the Gap: A Study of Education-To-Work Linkages, provides some suggestions which I feel are worthy of our consideration this afternoon. The study recommends:

1. Opportunities for unpaid work experience should be provided for all students in all major programs at both the secondary and postsecondary levels.

2. Secondary and postsecondary graduation requirements should reflect the importance of work experience for all students.

3. Follow-up studies of secondary and postsecondary school graduates and dropouts who did not immediately continue their education should be conducted annually to discern the extent and nature of misalignment between education exit requirements and work entry requirements.

4. Community Education and Work Councils, comprised of education, business, labor, government, and other community leaders, should be established. Sponsorship may come from the education sector, the work sector, or the community sector--whichever is willing to assume the initiative.

5. The State legislature or Governor should establish a State-Level Interagency Career Competency Assessment Board that would report to the highest levels of state education and labor government.

Ladies and gentlemen, if I have accomplished the task I set for myself this afternoon, I should have convinced you, by now, of several things. First, that the education system of our country, both secondary and postsecondary, is not meeting the needs of most students. Second, education/work programs are one logical, reasonable, and effective way to solve the unmet educational needs of many students. Third, such programs are as advantageous to the private sector employer as they are to the student. Fourth, that the advantages of such programs far outweigh the disadvantages. Fifth, with only 2 percent of postsecondary students and only 4 1/2 percent of secondary students currently enrolled in cooperative education programs, as an example, there are two basic unmet needs in education/work programs--greater student enrollments and a concomitant greater involvement of employers to provide work experience opportunities. And finally, that there are a great many people, both professional educators and laymen who, through their action to date, are willing and able to provide our young people the quality of education they have every right to expect.

In closing, I simply wish to say that postsecondary education/work programs, of both a paid and nonpaid nature, are apparently increasing in acceptance around the country. From my point of view this conference is therefore addressing a very viable educational issue at a very appropriate time.

But once again, that's from my perspective. And what do I know? I couldn't even see Charlie Brown's horse!

Session II
Wednesday, January 26, 1977

NEW VOCATIONAL EDUCATION LEGISLATION*

Dr. William F. Pierce

*An informal presentation on the topic of the 1976 Amendments of the Vocational Education Act of 1963.

OMB gets a piece of legislation and circulates it throughout the government. They also have solicit responses from other agencies. They make whatever changes they want to make to the piece of legislation. Any people involved can go over and argue with OMB.

The new piece of legislation decategorized and took a lot of little specific programs away. It did not require any longer for the state to spend a certain amount of money. You decide how much money you want to spend and you therefore, direct the program. You can shift the emphasis of your total state program the way you want it done. You could not do that before because you had to spend a certain amount of money. So, it is less categorized than past legislation. Secondly, it is much more concerned over the planning process. We now have the best planning mechanism than any segment in education. Before, Congress criticized loudly for a lack of planning at the state level.

The Congress is very concerned over planning at the state level. Some of the members and staffers are convinced, in working with us, that vocational education in most states is created, planned, and developed by the state department of education and specifically by the Director of Vocational Education at the institution. The director had the power and made those decisions almost unilaterally. Not all states have the director for power and decision making as described.

Vocational planning was unilateral before but, now the process has changed. There must be a planning council in every state now. They have indicated who must be on that council and who must be involved. They have stated how much that group must meet annually and what they must do. They have stated how many public hearings they must make and in an overall effect it is more precise. It contains more congressional decision and prescription than any other piece of legislation ever written. The only other exception is the Education For All Handicapped Children Act. This is probably a trend for the future. The planning process is one that Congress is very concerned with. They are very precise on who is involved, on how it is translated to the local level, they require local and state advisory councils and the planning process must begin at the local level and proceed upward toward the state level.

Accountability is also associated with planning. Once every three years, the state comes in and takes a look at every course that you offer and they decide what the criteria will be. The U.S. Office of Education shall establish criteria for the course offered. Those of you who run certain programs must justify the program with whether the activity you are engaged in is needed, whether young people are getting what you had proposed they would get, whether they are getting experiences that you said they should have, whether it is a specific occupational program offers occupations that are required in your community and whether the young people and employers are pleased. The federal government must look at ten states every year to make a quality analysis.

We can characterize it by a higher emphasis on using research money for new activities. Research money is supposed to fund new activities and not to maintain programs.

They have stated we have done a lousy job of providing occupational information and a lousy job of providing counseling. They gave up twenty percent for funding vocational guidance and we have only been spending about three percent. Some states have put all of their state staff on federal funds and some states were spending far too much on support services. They refused to look at the difference between support staff at the state level and ancillary services we provided to people. They are also saying too much money is staying at the state level and not enough of it is going to folks who need it. They said 50 percent of all the state staff must be paid for by state funds. They

also said you must spend two to five million dollars getting occupational information to people. They said we must do a better job of collecting data and set up a good procedure to get good information to people. This burden falls on your shoulders to make sure it is done.

Q: The Congress states the policies are less decategorized but, at the same time they are to be more precise?

A: Congress is upset with the administration of vocational education and not so much with the programs of offerings. So they made the program decisions more flexible and the decisions in the administration program less flexible. Congress wants to make sure you are doing what you stated you were going to do. Before there was no limit on how much you could spend on state administration but there was an overall provision that you must match one per one. With virture of the GAO report they decided that we could not handle it. That we did not care about kids and that we rather spend the money on ourselves. They came to the conclusion that vocational education was good, but it was badly run.

Q: Was the GAO report the basis of the prescription kinds of things that you're describing?

A: Almost without exception The prescription that is in the law is in the GAO report.

Q: What kind of reactions did you get from the persons involved about these perscriptions? Did they think that was wonderful or did they hate it?

A: It depends on the persons involved.

Q: Do you think other education programs will also be accountable for their planning? For instance English or Social Studies?

A: Insofar as there are federal funds put in those programs we will see that. That is not really a federal role. A federal role is to put money into EPDA teachers programs or into new teacher centers or also into title I programs.

Q: Since there are Federal dollars for the administration of laws and you make sure we can't get at those funds, does it go to other areas of education?

A: Congress did not really have any idea what the role of the Office of Education was. They thought the Office of Education had control over the total education system but, it only follows the rules and regulations of the law.

Q: Is it appropriate to spend vocational dollars for such groups as the handicapped?

A: I do not think it is inappropriate for us to worry about members of our society, whose needs are not really met. I do not think it is inappropriate for vocational education to focus on specific groups. The reason why the Congress has come down so hard on the administration is because since the 63 act was written, and revised in 1968, too many of us have not agreed on how the Congress has written the law. We use the law the way we want to. That is why they keep taking it out of vocational education.

Q: What will be your guess as to the appropriation as related to authorization?

A: I do not know the answer to your question. Carter is worried about balancing the budget but you cannot balance the program and set up new programs. HEW has fixed programs set aside. The welfare program is set up by law and health is similar. The only place you have flexibility within the budget is in education.

Q: Do you see any accountability for students who drop out of the program?

A: The accountability is going to be very difficult to handle. We are going to try our hardest to keep everyone in the program and make it a success to keep Congress happy.

Q: On that fifty fifty maximum for the disadvantaged, how tight are they going to hold that where we have "In kind" services to add to that fifty percent? How much change do you see

to what we have been doing, to what we will have to do?

A: I don't think that there is any new legislation that authorizes any kind of changes.

SESSION III

January 27, 1977

Objective:

*To ascertain the perceptions, expectations, and recommendations of individuals in key leadership roles in Colorado regarding Postsecondary Programs of Education/Work.

THURSDAY MORNING

8:30	Opening Remarks Introductions	Dr. Louise J. Keller
8:45	Conference Observations	Mr. Raymond A. Wasil, Director Division of Guidance Testing Ohio Department of Education Columbus, Ohio
9:15-12:30	SYMPOSIUM: OUR PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK	
	Introduction of Presenters	Dr. Richard Bear Associate Dean College of Education University of Northern Colorado

Presenters:

- Mr. John Brennan, Director of Adult Education; State Department of Education
- Dr. William D. Woolf, Director of the Division of Occupational Education; State Board for Community Colleges and Occupational Education
- Mr. Charley Newton, Colorado Division of Eastman Kodak Company, Windsor, Colorado
- Mr. John I. Lay, Executive Director Colorado Department of Labor and Employment, Denver, Colorado

15 Minute Break--

- Mr. Lou E. Carson, Assistant Supervisor of T & I; State Apprenticeship Coordinator of Related Instruction
- Dr. Dean Lillie, Director of the Division of Community Colleges; State Board for Community Colleges and Occupational Education
- Mr. Gordon Bourne, Project Manager (SPAARS) Governor's Office of Human Resources

12:25	General Remarks	Dr. Louise J. Keller

THURSDAY AFTERNOON

12:30-2:00	LUNCH	
2:00-4:00	FORUM BETWEEN SYMPOSIUM PRESENTERS AND SESSION III PANEL	
	Introduction of Panel Members	Dr. Lois W. Bennett Project Co-Director and Associate Professor Graduate Vocational Teacher Education University of Northern Colorado

Panel Members

- Dr. Dorothy Lawrence, Dean of Occupational Studies, Community College of Denver, Red Rocks Campus and Moderator of the Panel
- Ms. Jeanne Werschke, State Coordinator for Career Education, State Department of Education
- Dr. Don Carson, Resource Development Coordinator, Arapahoe Community College
- Mrs. Kay Turman, Supervisor of Postsecondary Occupational Education, Boulder Valley Area Vocational-Technical Center, Boulder, Colorado
- Mr. Larry Selland, BUSH Fellow at Colorado State University and on leave as Assistant State Director from North Dakota
- Dr. Don McInnis, President, El Paso Community College, Colorado Springs, Colorado

4:00	SUMMARY AND OBSERVATIONS	Mr. Raymond A. Wasil
4:30	Adjournment	

NOTE: All institutional participants will meet immediately after adjournment with Dr. Lois W. Bennett in the Red Baron Room to complete payment authorization forms.

Session III
Thursday, January 27, 1977

CONFERENCE OBSERVATIONS

Raymond A. Wasil

It is a privilege to be at the conference. I think it is a well organized conference. I think one of the things that hit me is that it is a working conference. You people came here with the idea in mind that you were going to work and you did a lot of good work. I didn't find the turfmanship that you normally see associated with this diversified group of people. I think you had some good ideas, you had some excellent leadership. There was good organization. The pattern that was used was excellent in terms of providing you with information and allowing you to react to it.

In that respect, I used to tell jokes but I've gotton away from them and I'd like to talk about parables and little stories. I've got a little story I'd like to share with you that I think relates to this conference. It's a story about way back when we had wood piles and we heated our houses with wood. We may come back to that in Ohio, because we've got all your snow there. This is about a young man who was given a latern on a very dark night by his father. His father said, "Son, go out to the wood pile and get some wood." The son stepped out of the door and he said, "Daddy, I can't see the wood pile," and the father said, "Well, how far can you see?" The son said, "Well, I can see about three steps, Dad." And the father said, "Take the lantern and walk the three steps." And the son did. And then the son said, "Dad, I can't see the wood pile." And the father said, "How far can you see?" And the son said, "about three feet." And by this process of three feet at a time, with the light available, the son got to the wood pile. And the same process coming back. And I think it is the same way with this conference. Our objectives and goals were out there but step by step, section by section, we started working towards them. I think you have accomplished a good many of the goals that were set, or the objectives that were set by this conference. In particular, those that related to Session I--Seeking a Consensus of Working Definitions. That we have done. In the back of your binder there are definitions that we did work on and did come up with a consensus--a group consensus. Assess the organization, administration, and financing patterns of postsecondary education/work in Colorado--I think we've done that. We got good excellent input from all of you. Delineate a set of problem areas and ways and means for improving and expanding or installing programs of postsecondary education/work in Colorado. I think we've done that. I think we've accomplished all three of those goals. They're not polished, they're not finalized, but we have come up with a consensus. What I would like to do is to walk through the program and talk a little bit about what each one of the presenters said, in my opinion, my observation of what they've said.

We can start off with the second Session. At 9:30 Tuesday morning, in terms of job development and placement services in Colorado, we had Nellie McCool. I have had an opportunity of working with Nellie, and I found her to be a very, very dedicated, interested, concerned individual. She talked about placement services being critical in this state, and I think as we went around from group to group, this kept cropping up. There is a need for placement services. Where does it fit? Her frame of reference was perhaps the secondary school rather than the postsecondary school , but I think the basic concepts of placement services, the organization delivery of it are universal.

She talked about the yo-yo effect in terms of funds. I think that's something that came up in almost every group. We can move so far with funds, we can move only so far without funds. What are our priorities. Our priorities are determined by funds. Tell me what a priority is, give me the money and you'll have it. Give me it as a priority, I may not be able to move it. She indicated that there is a need for training of people in the placement area. The assumption that you can take anyone and that person automatically becomes a good placement person, is wrong; it doesn't work that way. There are certain characteristics that each one of us has that makes us effective in our job and this came out of her statements.

In terms of Vocational, Cooperative Education legislation, the term lifelong learning kept coming up time and time again. Nellie related to this term and talked about the need in this state for at least fifty spark plug people to facilitate placement services.

The second speaker, was talking on Cooperative Education Programs. He indicated, and this was Dick Gritz, the need for responsiveness to changes in society. We're not changing to meet the needs of society as rapidly as we could. He talked about the need to involve business and industry. To involve the resources that business and industry has in conjunction with our students on our campuses. We've got tremendous resources out there which, in most cases, are not being tapped, or if they are being tapped, they can be tapped even more effectively. He talked about extending the activities past the campus. Past those parameters, those streets out there that limit us in terms of space. He expressed concerns about growth of coop programming in the state of Colorado. He extended an invitation to work together to expand cooperative education in this state.

Then we had Charlene Collins. Charlene talked on Cooperative Vocational Education Programs in Colorado. Whe talked about the heavy teaching load and the teaching role. Who will do the Coop? Are we going to talk about teachers who are currently operating in that area going out and doing this, plus everything they are doing right now. There are only 24 hours in a day. You can't be in the classroom and out doing these other types of things. Then she hit on another key that has come out during the conference, and that is the need for administrative support. Top to bottom, not bottom to top. Someone came up with an interesting comment yesterday. They said maybe we should take a look at this whole structure, the organizational structure, in reverse. As it exists now, we've got the students at the bottom. Why not turn it around and put the student at the top, and then work backwards. I thought that was a very astute comment. She said that there was a breakdown of communication. That we needed to communicate a lot more than we do now. Not only within our own respective areas, but between the various levels of education. She said there was a need for consensus of technology, a need to define some of the personnel duties and responsibilities, and also to take a good strong look at the relationship between dollars and credit. And that we need cost studies.

Then we had a very interesting gentleman come up, W.P. Hardwick from the Veterans Services. I always found it very interesting working with the Veterans Administration. One of the first things he said was that he was leaving to go to Washington and wouldn't be around too much. I think we got some very good responses out of him in that respect. A couple of the things he said to us that I think as educators we really haven't pried into. One of them was that administration determines what is done. The law determines. Regulations, the law, is what we have to follow and we can't change the law with regulations. Then he hit on two other things that I think come out of this conference very, very strongly. One is the need to become more politically active. If there is something that is happening that is part of a regulation or a law that we don't like, then perhaps we should have some input into it. He indicated to you that the regulations are posted in the Federal Register and you have 30 days after that to react to them. There is a possibility of even another 30 days after that. How many of us look at the Federal Register? He said that if you need help in terms of better regulations that the veterans administration is available not only in the interpretation but in providing you with information in terms of what resources they have available. I think that what he was saying is, become involved in the Veterans Administration to a greater degree. Find our a little bit more about the process by which these regulations are dropped on you at your various institutions.

Then we had Paul Gaiser, and I found Paul to be a very, very interesting person because he came back as part of the panel and had a lot of excellent things to say. He did an excellent job throughout the program. He discussed financing at the state level, particularly financing the vocational programs. He talked about legislative directives related to funding and he indicated something that maybe not all of us are aware of because we are tied into our own little pockets of interest. There are only so many dollars, and there are not enough dollars to meet all of the needs that exist. We all recognize that all the needs are out here. These groups of people need help and I need help. But there aren't those federal dollars. I think that one of the things he was saying is, that you feel strongly enough about what you are doing and what your needs are to make sure that somebody hears you. As an individual you don't have as much strength as you do collectively. I think collectively we do represent a very powerful force in this state. At least if all of your titles and positions and responsibilities mean anything.

Norbert Baumgart talked on Financing Cooperative Education and Higher Education. He discussed Public Law 94-42, the Higher Education Act, Title 8, which will replace 4D if you didn't have the notes on that. He talked about grants that can be made to institutions and discussed amounts, he discussed research monies and those types of monies that are available. He also used the term lifelong learning. Dr. Pierce indicated to us yesterday that there were monies that were going to be made available later to lifelong learning, because Vice-President Mondale, when he was a senator,

sponsored that legislation. So if the Vice-President has any power, I think you will see a move in that direction on this lifelong learning and I think you will see dollars tied to it.

In the afternoon, we broke into caucus groups and discussed a number of areas. Those areas were designated A1, A2, B1, etc. There was no reference in terms of skill or ability, but I did notice that all the Community College people were over in the A group. One of the things that we were given as tasks in the group was to discuss the definitions and to review them. The second one was to delineate and discuss adult learner needs from education/work programs. A couple of questions came up there. One is the question of how are priorities established in secondary education. Some people were seeking an answer to that. The second one is, how does vocational education and career education interface. The other one, which is one that is a national concern, is how are we discussing school needs or individual needs. Are we concerned about the institution or the individual? I was very gratified to see that many of you during these past couple of days were talking about individuals. In a couple of the sessions, we got off on institutional needs and somebody said, "Yes, but what about the students." I felt very good about that because that is basic psychology, and with my background being to a great extent in the guidance and counseling areas.

Another question that came up, that was discussed was the administration of education/work in Colorado. The response to the needs came up in terms of administration. Administration must provide a leadership role with input. Going into this still further, there is need for centralized services for coop information in this state.

Also, consideration must be given to the needs of differentiated and differing local populations. This came out as one of the consensuses of the group. In my mind this is identified as a priority area.

Then the question came up in terms of what is the organization of finances for services that may be available. Then we went into another area, and this is primarily coop in terms of who organizes and administers the program, what are the funding sources available, who will evaluate these types of programs if they are created, and who evaluates those programs currently in existence. Is that evaluation on the local, or state level, or is it tied to the national in terms of funding sources?

Then there is a need for the coordination of existing agencies that institutions work with on both the local, state, and regional basis.

The other thing was, there was concern about everyone doing their own thing. There needs to be some guidelines. Broad guidelines where individuals moving from one area of the state to the other could fit into, rather than get into conflict with.

Then the need for definition of terms came up. Not only the terms that are in the book that you have, but other terms.

The age old question came up in terms of, "Are we talking only to each other?" Should we be talking to legislators, business people, (here, I can think of at least four instances where people have siad, "why aren't we talking to business people?"). This conference was not designed for their involvement at this point, but that does not say future conferences, and I am sure there will be, couldn't involve these people to a greater degree.

The other question that came up was, what is our commitment as educators to business and industry. Are we going out to these people with our hands out saying thank-you. One of the things that always grated me was to have lunch with a businessman or a group of businessmen and have one of them say, "I'll pick up the tab because I have an expense account." When it came my turn to pick up the tab for five people, it always came out of my pocket. It puts you in sort of a secondary, embarrassing type of position. I don't particularly like that, not when I'm supposed to be working with them on a equal basis. I don't think we go to them as executives, we go to them with things to help them. It will benefit them but it will also benefit us in terms of the population that we are working with.

There was some concern in terms of the turfmanship. Then the question came up again in this group, in this particular session, of the need for administrative commitment. There is another thing that is going throughout the entire conference--the concern for administrative commitment. Someone indicated the need for computer assistance in handling the vast amount of information and knowledge that is out there. Before we can do that, I think what we would have to do is determine what we want within that computer assistance.

Then the concern came up in terms of, well, a lot of these things can happen if we just legislate. Let's get our legislators to pass laws. Then I think I felt a unanimous concern in terms of perhaps we're over legislated right now. We have too much legislation--too many regulations. That is getting us to the point where we are not able to do a lot of the things that we would like to. I know in relation to some legislation, it gets to the point where you say, "hey, why even try."

We discussed the finances and patterns of education/work programs in Colorado. The consensus was that there is confusion in terms of how finances are made available, what FTE's are, the amounts of money tied to them, how this varies from section to state, from program to program, and the concern of the people at the operational level who are not aware of financial considerations. They were the ones who felt the effect of cuts as they occurred. They should be more knowledgeable.

We have representatives of three institutions with us: Community/Junior Colleges, Local Educational Agencies, and Area Vocational-Technical Schools. One of the things that came out of the first of these presentations was, this was from the Junior College, the need for communication not only to be established, but to be maintained. The need for this type of system, and the need for input into the communication system between all of you in feedback. There was concern for the need for full funding as compared to partial funding. And again, the concern for the need for commitment of administration. The feeling was there at the Community Colleges that they wanted to retain community control. I think, as Dr. Pierce said, as federal funds come, so comes control. There was a feeling that you cannot be responsive to the needs of your local district if you don't have some of that local control. Need to coordinate political activity rather than keep on running to the legislators and hitting them with their own little individualized needs. That a broader picture in terms of financing of Junior/Community Colleges needed to be looked at.

In terms of the Vocational-Technical Schools, the feeling existed that there was a need to improve existing programs. Management by objective approach was needed. Goals established. Goals that could be documented, evaluated, and reported on There was a strong feeling that came out of that, that quality programs will attract students. If you've got something that is good and that they need, the students will be there. If not, they won't. All the publicity and advertising in the world won't attract them to it, or if it does, they won't stay. The gentleman who made that presentation, Mr. Lyons, said there is a great need for us to work in tandem not in random. I thought that was very true.

Then the Local Agencies, the problem there that came up was funds, funds, funds. They need money. Competition for dollars between all of the educational institutions in the state that are working with this particular type of program. That there is a need for all of us to work together in these programs rather than work competitively for the few dollars that exist.

In the evening, we met Anita Salazar and she presented a paper. That was the base for the Wednesday morning discussion. The paper was critiqued and information was added to it. The objectives for that day were to review and critique the conference paper and suggest alternative patterns for organizing postsecondary programs of education/work. And to critique common and criteria necessary for effective programs of education/work in postsecondary institutions. To discuss with national leaders the need for more effective programs of education/work. To become aware of the new vocational education legislation. The later two, Dr. Pierce did an excellent job of.

We met in these four groups and discussed these areas and tied these areas to the needs of those representatives from the institutions in those groups. (Community/Junior Colleges, Area Vocational-Technical Schools, and Local Education Agencies, and Others.) We then had each one of these groups come up for a very brief report and then we gave them one minute to respond to just a question that was thought up at the last minute. As I went around to each one of those groups on that day, I think initially there was some confusion as to what they were to do. As the hours progressed, however, things started to pull together, the ideas started to come together. I think they did three things: once they started to communicate with each other and saw that even though they wear different hats, and have different titles, and come from different institutions, you do have common concerns. The paper served to focus those common concerns into specific areas. The second thing is just the idea that you were talking together. Sharing ideas. The third thing is that you did come up with consensuses that could be used. To get this large of group of people together and to be able to agree on just definitions of one word is sometimes a major accomplishment. I think you can feel very, very good about what work you did yesterday and the things that came out of it. I think you did one other thing , perhaps, and that was identify some very critical need areas that all of you are concerned with. Also, you now know each other.

Dr. Pierce did an excellent job, and I can go through all types of notes in terms of what he said. Let me just hit on three or four things. He indicated that there is a need to stress education rather than just work. He talked about the unemployment of youth in this country being about 21 percent of the total unemployment. He talked about dropout classes being larger than graduate classes. He talked about the word that has been misused and beaten to death, and that is relevant education. I don't think that he could think of another word and I certainly can't either to express what out goal as educators should be.

There is a need for education that has some use for people on an immediate goal basis, a short term goal basis, and a long term basis. I think that these programs that you people are working with meet those needs. He talked about the need to work with industry, the greater need for flexibility in class structures and in programming. And the need to reduce the isolationism that exists between older people and the younger people. There is a need to bring some of these older people into your institutions. I think you could elaborate in terms of some of the benefits of older people sharing some of their knowledge with the younger people.

I think you people have done an excellent job, I think that the people that have formulated this conference are to be congratulated for putting it together. I appreciate being here because I think I have learned one heck of a lot. I would like to leave you with a thought before we go on. There are four kinds of people. There are the kind that does not know when things are wrong; the kind that knows that things are wrong but doesn't give a damn; there is the kind of people that know when things are wrong but don't care enough to try and make them right; and a fourth group who see something wrong and work to make it right. I think you fall in the latter kind of people, that know when things are wrong and care enough to try and make them right. Thank you.

Session III
Thursday, January 27, 1977

MY PERCEPTIONS, EXPECTATIONS AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK

John Brennan

Many of you realize that I have been with you for the entire week, and I have had the privilege of working on the steering committee, and have enjoyed, as Dr. Wasil indicated, the success so far of the conference and of the way it has been functioning. To put the thoughts I had for you today in perspective, let me tell you a little bit more about myself, because I think it has a bearing on some of the suggestions I would like to leave with you. Having taught in a community college, having been a principal of a reform school, having worked in five different states as a teacher and an administrator, and now having worked in the state for some twelve years, I am an administrator primarily in the area of remedial education for young people and adults. I have a strong feeling that many of the learners you are working with come from that population.

In adult education, we talk about these people as the target population. Many people are not aware of the fact that in the state of Colorado (1970 census), we have six hundred thousand people who admitted that they had not finished high school, and a third of those admitted that they had not completed the eighth grade or had a limited type of education. And that's a very traditional category of the people. In 1970 the state of Colorado had about a million eight hundred thousand people above the age of 16 (one third of the population), fall into this category. If you stop to look at the way the population has increased at that time, there were a lot of people who didn't admit that they had not completed high school, and some admit that they lack some of the skills that are prerequisites for success in life. There are many people who did not admit it that also fall in that category, but possibly graduated or achieved success in life in some other form of achievement. It's a very astonishing thing to me when you look at the fact that in the state of Colorado, despite these other figures in 1972, there are now about fifteen thousand people, (while in 1972 there were only five thousand people) asking to take the G.E.D. tests. You look at the federal funds that are coming into the state to serve the six hundred thousand people who want to complete high school and there's only a dollar per person. That's six hundred thousand dollars. So don't feel too bad about the funding problem you are encountering.

I sit here and I envy you because you have state money and try to reach these people that you are concerned about. I look at the people I am supposed to work with and bring up to the level so you can work with them, and try to get them a job. I can't even get them up there. There's not enough money. I use the personal pronoun, and I don't mean in a sense that it's just me. There are a lot of people out there working in this area.

Since the inception of the Adult Education Act, 1965, the state of Colorado has been able to reach less than seventy thousand of these people who have reached the level of the G.E.D. completion, or have dropped out of the program, or have moved back into some other activity, or have gone back to college and so on. You know there's a lot to be done. And I guess the thought that really comes to mind is, when we did the Colorado Adult Needs Assessment Study, a couple years ago, it became very apparent that the state of Colorado has a tremendous amount of resources involved in education. Anybody who works with state funds realizes that out of the state tax dollar, 66¢ of the state tax dollar goes to education. As Mr. Gaiser said the other day, we will get to the point where there's not too much money left to shift around. I guess my thoughts to you today are, why not look at some other alternatives within the system. Why not look for some shift in the priority? Why not look at some other resources that we have in the state that are not too costly? I think if we start moving in that direction as educators, as leaders, we'll have a better chance of maybe sometime down the road selling the decision makers (the policy makers) in our state with the reality that we are dealing more and more with an adult population. The best estimates I can possibly give are that in the next ten to twenty-five years we'll be a predominant population of people between the ages of 16 and 50. The bulk of the population in Colorado is between 16 and 50 years of age, not kids.

That brings me to a thought that I would like to share with you from Elise Bolding, futurist sociologist from the University of Colorado. I heard Elise say one time, "Think of a pyramid and at

the top of it we have children constantly being poured into that pyramid. If you turn the pyramid over, the children are on the bottom, and that's the way society treats them. They put the whole pressure of the world and our problems on kids and education."

Our greatest resource is not kids and really when you get down it it, as Dr. Pierce eluded to yesterday, our greatest resource is people. I think there is enough proof now when you look at Piaget and other people, that kids don't get all of their education in kindergarten through twelfth grade; and I say that as a father; I say that as a person working in remedial education and, I say it just from an experiental position. I've learned much in this conference and I'm getting new skills to function in life at the age of 43.

I think we, as professionals, ought to be moving and trying to sell these kinds of truths; you know they are not myths. They are reality, and I think we have to move into the whole issue of community involvement and help the community to understand the people we are working with. I don't think most people will turn around and see who are the people--who are predominant people in our society. What are their needs? We have to start articulating these kinds of issues.

One of our greatest groups that are not used, I think, are senior citizens. And my one thought for you--the recommendation will be to really go out and look at ways in which you can bring the senior citizens back into the fold. I look at my mother-in-law, who was a teacher for 42 years. She is not allowed to be a tutor in the school district. She is not allowed back because she might put somebody out of a job. All she's asking, because she has arthritis real bad, is to have an immediate parking spot close to the school and she says she'd work four or five days a week twenty hours a week possible, for over a period of a year to help kids to read better. But she's not allowed, possibly because somebody has not thought of it.

Look at some of the issues you are dealing with in job work and so forth. Why not bring back retired workers? They know the job market; know business and industry; and actually let them help you get at job placement. Why can't they do some of the evaluation? Why can't they evaluate the students who are out there on the job and informally sit down with them and give them a system? Don't just turn them loose. Give them goals and objectives so that they are successful citizens who are fed up with doing it and there's no way to find out if they are successful or serving people and finding their objective and goals. I think we ought to take another look at the senior citizen resource. It's a tremendous resource.

I was in Washington, D.C. about a year ago and had supper with a family. A man who has been a CPA most of his life, retired from the federal government, was saying, what can I do? I'm 62 years old. We were looking at the paper and Temple University was looking for four part-time CPA's to help in a program and the indication was they had been looking for six weeks. They couldn't get part-time CPA's in the Washington area. He made a phone call, in my presence, and found out that they would love to have him. He indicated that something like twenty-two hundred CPA's, that worked for federal government, retired in the Washington, D.C. area. Every month some group of these CPA's got together for luncheons, like senior citizens do very often, just for friendship sake and no one had tapped that resource. Can you imagine twenty-two hundred people like that, with all the talents of ins-and-outs working for federal government and in the whole business and industry sector. You know they are here. Colorado is loaded with senior citizens. In fact, I bet if you walked around the state of Colorado, you could find a great number of retired armed forces people with a tremendous amount of experience in both the armed forces and in the public sector, looking for ways to utilize their talents. They want to be used. Having known people who are in the senior citizens world, I know many of them need it for sanity purposes. And I think we would do them a real service to ask them to come back, but we would have to find a way to do it. I think that would be a wonderful project coming out of a conference like this--to find a way to bring retired persons in, both male and female.

Another thought that really runs strong from my hearing you talk, and listening and reading the literature, and in my submission of thoughts to the conference (I've left a bibliography on the whole area of counseling) is my doubts about people knowing how to counsel. I would like to share with you the fact there is a very good meeting coming up February 19, on Saturday morning, down at Auraria Community College. Dr. Wynn Atkins, from Columbia University, will be on stage. He has done about four years of research and model building for adults in the area of counseling, especially the disadvantaged people; who don't know where they want to go; how to set goals for themselves; how to understand themselves, especially when they are recycling and so forth. Wynn will be in our

midst and I think it will behoove you or the people you work with, to take this opportunity to participate in this free meeting. I have had the privilege of working with him, and I think he has a great deal to offer.

Another point that I would like to share with you, would be to work directly with your counterparts, on faculties, community colleges, vocational schools, and especially your academic friends. I used to be one of them. I still respect them and I like many of them. These people, frankly, don't understand many of the issues that you are dealing with. They don't know how to get at some of these issues. Look at their backgrounds and look at when you made the transition from the academic world to the vocational world of helping people. Most of these people have never had differential psychology--they don't understand the needs of human differences. I was 35 years old when I got into human differences and started reading Ashley Montague and people like that. There are other needs out there besides textbooks, besides multiple choice tests, and FTE problems. There are human problems out there.

I had the pleasure of working with Dick Gritz of Northeastern Junior College and I see the benefits of his work. Dick can tell you some of the problems that I had, and he had, trying to sell my learning lab to help kids learn how to write, read, and to do abstracts. We need to work with teachers and help them to realize that this is some of the real issues of success and learning. We have to get them involved and I think it behooves each of us as we go back on campus or wherever we are, to try to involve them in our king of programs. To invite them out, try to help them to see all of the problems that the students are encountering, and relate the skill issues to the content issues. I think it means a lot of effort, but I think it is worth it. I have enjoyed working with you and, like I said, I have shared a bibliography of some of my thoughts for the final proceedings of the conference. Thank you for your kind attention.

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Session III
Thursday, January 27, 1977

MY PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK

William D. Woolf

I have personally been involved with work study at both the high school and university level. I have also been a teacher educator. Our agency is heavily involved with the topic of the conference. Consider for a moment, these involvements: first in program approval. As you know, an LEA submits their application for a program to us with verification of need, survey of student interest, course outlines, etc. Many of those programs promoted by us in the course of about a year have some component of work with study. We are strong supporters as an agency of this kind of configuration.

Second, in terms of quality control, we have a number of mechanisms with which to check the program quality and offer technical assistance. The study component and the work component of those programs are used as one in the same. A quality check is made on the work component as well.

Third, I think you know and have already been briefed by Paul Gaiser on funding and our involvement in funding. We are dedicated to getting the level of funding needed to run the program. This includes the work component. We are also involved in follow-up studies. We have LEA's in this state heavily involved in this enterprise to find out what is happening to students. This year, the new law requires that we also follow-up employers to find out what they think about the product of vocational education. We have done this in informal ways, and in a more limited basis; but this year on a more comprehensive basis. I think we have come up with some background on employers concerns and attitudes towards the end product. I think we do have pretty good input from employers who are cooperating with us in what we call the coop program. Instructors and teachers are visiting those people on a regular basis for the purpose of finding out how the student is doing. I think that in that type of work study relationship, we have moved far ahead of some of the thrusts even at the national level.

I think you also know that we have been involved with special programs called Coop G. We are a recruiting agency for VETS. Each month we take a list of approved OJT (on-the-job training) programs to the board for approval. Our staff is then heavily involved with visiting each of those. I think we know something about what that program produces.

Our agency is also involved with apprenticeship. We have the mandate to help with instruction in apprenticeship programs. We are involved with work study. We are a regularitory agency for private schools.

We feel placement and job development is an important dimension to the vocational program in its entirety. We are dedicated to that. We need counseling and career exploration at the beginning, training in the middle, and then the bridge between the world of education and the world of work and helping a student find a position worthy of his training.

We are heavily involved in industry. I think if you talked to businessmen, most of them would know something about vocational education. Many of them would be on advisory committees. We have attempted to involve them.

From federal and state law, we are involved with students at all levels. I believe strongly in the local role, I believe strongly in the state role, and I believe very strongly in the national role. Where would we be if the federal government hadn't said, "hey schools, you need to re-adjust your thinking a little and move toward vocational education/work." The federal role is an important one. I believe the same thing about the state role. And that doesn't take away from the importance of the local role.

There is a great need for education of adults. The magnitude of adults needing vocational training is somewhere around 68,000 individuals. Add to that the underemployed, those who are

not satisfied with their jobs, and those who want to get some advancement in their job, and the numbers grow. There is enough for all of us to do. When you look at the diversity that has already been spoken to, with reference to the young and the adult workers, women coming back into the labor force after fifteen years, geographic location, economics, the disadvantaged and their learning gaps, language differences, families in their fifth generation of unemployment--think of the intensity of the problem, not just the diversity and the magnitude. All this says to me that the demand and diversities of the problem have no simple solution, and anyone that thinks there is one is naive. In my opinion, there is no single coordinated structure that can do it all for all people at all times. Show me a state that has been able to put the act together in adult education. I challenge you. I think to the extent that this conference tries to drive from that baseline and tries to drive to that goal will be to the extent that all you do is put your spoon in the soup and stir a little more and pull it out and there will be no recognizeable difference. The diversity itself is so great that there is no single answer that is going to do the job.

The second thing I think it says is that society does not have the funds to finance the total effort. We must prioritize, we must take this problem piece by piece. It's not that it's not desireable--it is desireable of course--but the fact is, can we do all that is desireable. We do not have unlimited resources. U.S., decades ago, decided on a great experiment and that experiment was free public education. First few years, it continued to the seventh grade. Then to high school, In 1862 to the university, then to community colleges, area vocational schools, and these kinds of institutions. How far can we as taxpayers and the public go. We need to be somewhat realistic. Can you honestly and with integrity recommend that the government extend itself to provide all the benefits of education to all persons and all of the needs that we have in this society. And, are you willing to pay for it. I don't think so--I don't think you're willing to pay for it. I think that is one of our problems--we keep pounding a shoe on the desk and demanding that government move in that direction without any thought on our part about whether in fact we can attain it and then when we don't attain it we complain about administrative lack of support.

Some concepts about postsecondary work experience. When you look at all the different terms we use and we brand them back and forth interchangeably, it's no wonder that we have trouble with support because nobody knows what we're talking about. I am certain that in the minds of the general education administrator, business, community, and students, there isn't a clear differentiation between coop and work experience and work study and internships, etc. I think it is time to define and to begin to fight our battles on what is our preferential mode. Do we know what the advantages are, what the potential risks are, and do we know what the weaknesses are. I think we must keep in perspective what we are talking about. Too many of us think of the work dimension as being program. In my opinion, the work dimension is not a program. The work dimension is part of the program. The best single mode, the most preferred mode, is that mode that will give us the best chance to achieve your goal. To experiment with a human being, to risk with a human being, to me is no better than the medical experimenting with a human being. If you take a person who has no confidence in the educational system and you finally entice him to come into a program, and then we don't have that program carefully enough designed to assure success, that student then retracks and retreats back. It will be years and maybe a lifetime before you entice that individual out again. And do you know how many that has happened to in the ghetto areas of our country? I believe that we have got to start looking at risk capital, and risk venture and stay with proven and tried and tested means. Are we going to go back and make the same old mistakes year after year or learn from mistakes. I see the work program much like the lecturer, panels, labs, and simulation. I see that as the method of instruction. It's a way of reaching out to the businessman and saying, "hey look, we've got a job to do, we think you can do certain components. What we'd like you to do is share your resources with us. We need more resources for what we want to do. That is one reason. The second reason is that these students need a practical application, a keystone, a capstone, to their educational experience and that's what we ask you to do. We'd like to work with you and help design that." To me that maximizes success. Chance of failure is greatly reduced. If you take a person and dump him on the businessman, you don't know who that businessman is, you don't know what the environment is, you don't know anything about the student, and you miximize the chance for failure. I think it is time somebody stood up and counted the cost of the failures of that kind of an enterprise. I hope we avoid the mistakes of the past. I would rather go to an alternative to the work component than to have the kind of failure that I think is occuring rather regularly. The alternative, in my opinion, would be simulation. I'd rather go that direction than I would to risk a whole program.

We are having trouble with funds, I believe, because we have not carefully enough guaranteed the product outcome. We've got too much of a mix of a bag of tricks. Too big a mix for people to really know what we are talking about. Therefore, the average comes out to be less than what we know and can do

Session III
Thursday, January 27, 1977

MY PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK

Charley Newton

We are asking our students today to choose their career carefully because they may be in it the next forty years. The hardest part of making that choice is knowing what the alternatives are, what the consequences of those alternatives are, and then convincing yourself that your conclusion is right.

What I'd like to do today, is to talk to you as a businessman about the job that you are faced w th. I'll try to speak as a businessman, although I have been accused of speaking as an educator lately. Whenever we undertake a project in business, we do a market research. You folks do your needs analysis The market is booming for postsecondary education. The individuals between the ages of 25 and 44 will increase by 24 million people between now and 1984. When we are looking at a market and trying to determine what we are selling, and how that product is going to be received, we have to dig in there and find out who's in that market. Granted, we have those adults who need those special skills who do not have a degree. But the number of individuals entering that market, without a high school degree, will drop by 16 percent between now and 1985. That means, within that market is a group of people with a great a learning ability, people who are more apt to turn to education because they've had a successful experience. Also in that group are people who may not value education as much as they have in the past. For example, those individuals who have been trained as educators. Four million of them by the mid 1980's with only two million jobs. Two million will be walking in that market, scratching their heads, wondering what kind of a program did I get into. How come I'm out on the street looking in. The economic value of a college degree has decreased. For example, a liberal arts graduate today can expect to earn $9,000 a year upon graduation. The retail grocery clerk down the street is getting more than that liberal arts graduate. These people are going to ask a lot of questions; they're going to look at the quality of your product. You can't do the job alone; you need business, industry, labor and government to help you sell. Business and industry have something to offer as co-equal partners. But there are some philosophical differences that you and I must work out before we embark into that market

There are actually two hands to discuss here: number one, education is a means to an end; number two, that education is an end in itself. Your product must be a means to an end if it is going to sell. An end as defined as a fuller, more rewarding life of which an important part is a career. There are three parts to life; education, work, and then retirement or obsolescence. A formal degree or diploma has often been an end to that first segment of life. We must look upon education as a life long process. We must do away with this concept that education ends with a diploma. Along with these philosophical differences, I am concerned, and I think you probably discussed it already, postsecondary education/work programs are extremely valuable. We must take from the best of those and build on them and try not to reinvent the wheel in Colorado.

The development process that we use within industry is another important topic. I'm sure you can use it in your operation as well--and probably already do. First of all, we must be talking about individuals. A catalog of programs is just a myth, a story book, until we can bring an individual group through that story book to success. In my role in the plant, I work with many, many individuals. Individuals who are looking for help. They're not satisfied with where they are now, they want to improve themselves. There are four steps we use in trying to help these people. The first step is self awareness, to help people know who they are. They need to know what marketable skills they have. Career awareness is the next step. What careers are available, what are they like, what skills are needed, what's the economic payoff, and what are the odds that you'll get a job. The next step in our developmental plan of action if to help an individual form a plan of action. One group of individuals that we deal with, rather intensively, go through a program which is based on extensive job analysis so that we have identified the critical dimensions that lead to success in that job. What we do is put these people through two days of simulations. They are evaluated, they are appraised as they go through those two days. The result is a developmental plan. We know where an individual has some developmental needs, and we also know what their strengths are. We do this so that an

individual can plan their education to increase the effectiveness of time utilization. Time is critical for these people. The next step of the developmental process is to assist the individual by identifying means or areas where they can satisfy that developmental plan. It may be training programs, it may be university programs but more than likely it's job assignments or special on the job programs.

In industry we state that an individual's development does not take place in the classroom. I don't know what percent does. It might be that 85 percent takes place outside the classroom on a well designed job with a supervisor who is interested in that individual. Four steps: self awareness; career awareness; a developmental plan; and a method of achieving the plan. Let's fit postsecondary education/work programs into those developmental stages. As I mentioned before, I'm sure it fits into the career awareness phase and it may fit into others. According to the directory of coop education, published in 1975, the educational advantages of students in coop programs are these. First, students find greater meaning in their studies. It increases student motivation because it connects reality with what's in the classroom. There is a greater sense of responsibility. An individual develops a greater dependence on their own judgment. There is a greater understanding of other peoples skills--human relations skills. They are definitely oriented to a world of work. But by being in these programs they know more about not just what the job is, but what the career is all about and what the pay offs are. If those things don't fit in nice and neatly with the developmental process, then I think we have a problem.

Postsecondary programs, coop programs are of excellent value. In fact, industry pays a little bit extra to the graduates of some of these coop programs. When I'm trying to propose a new program at Kodak, I'm asked several questions: what is the objective of the program, what alternatives have you considered, what are the costs of these alternatives, and how do they meet the objective. And then prove it. The last question is, is there a better way to utilize the existing limited resource? For example, since the coop experience for one student benefits only that student, would the coop experience for a teacher or counselor benefit more people. What's the cost benefit analysis picture for postsecondary education/work programs. If we can answer those questions, I think you will be able to direct businessmen and get them more involved.

Our experience with coop programs is good. As I mentioned, we pay a premium for graduates. The students do not have a difficult time in making that transition from education to employment, their feet are on the ground and their heads aren't in the clouds. A well planned program, one that meets your objectives in providing a full enriched life which makes an individual knowledgeable about careers will succeed.

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Charley Newton

We are asking our students today to choose their career carefully because they may be in it the next forty years. The hardest part of making that choice is knowing what the alternatives are, what the consequences of those alternatives are, and then convincing yourself that your conclusion is right.

What I'd like to do today, is to talk to you as a businessman about the job that you are faced with. I'll try to speak as a businessman, although I have been accused of speaking as an educator lately. Whenever we undertake a project in business, we do a market research. You folks do your needs analysis The market is booming for postsecondary education. The individuals between the ages of 25 and 44 will increase by 24 million people between now and 1984. When we are looking at a market and trying to determine what we are selling, and how that product is going to be received, we have to dig in there and find out who's in that market. Granted, we have those adults who need those special skills who do not have a degree. But the number of individuals entering that market, without a high school degree, will drop by 16 percent between now and 1985. That means, within that market is a group of people with a great a learning ability, people who are more apt to turn to education because they've had a successful experience. Also in that group are people who may not value education as much as they have in the past. For example, those individuals who have been trained as educators. Four million of them by the mid 1980's with only two million jobs. Two million will be walking in that market, scratching their heads, wondering what kind of a program did I get into. How come I'm out on the street looking in. The economic value of a college degree has decreased. For example, a liberal arts graduate today can expect to earn $9,000 a year upon graduation. The retail grocery clerk down the street is getting more than that liberal arts graduate. These people are going to ask a lot of questions; they're going to look at the quality of your product. You can't do the job alone; you need business, industry, labor and government to help you sell. Business and industry have something to offer as co-equal partners. But there are some philosophical differences that you and I must work out before we embark into that market

There are actually two hands to discuss here: number one, education is a means to an end; number two, that education is an end in itself. Your product must be a means to an end if it is going to sell. An end as defined as a fuller, more rewarding life of which an important part is a career. There are three parts to life; education, work, and then retirement or obsolescence. A formal degree or diploma has often been an end to that first segment of life. We must look upon education as a life long process. We must do away with this concept that education ends with a diploma. Along with these philosophical differences, I am concerned, and I think you probably discussed it already, postsecondary education/work programs are extremely valuable. We must take from the best of those and build on them and try not to reinvent the wheel in Colorado.

The development process that we use within industry is another important topic. I'm sure you can use it in your operation as well--and probably already do. First of all, we must be talking about individuals. A catalog of programs is just a myth, a story book, until we can bring an individual group through that story book to success. In my role in the plant, I work with many, many individuals. Individuals who are looking for help. They're not satisfied with where they are now, they want to improve themselves. There are four steps we use in trying to help these people. The first step is self awareness, to help people know who they are. They need to know what marketable skills they have. Career awareness is the next step. What careers are available, what are they like, what skills are needed, what's the economic payoff, and what are the odds that you'll get a job. The next step in our developmental plan of action if to help an individual form a plan of action. One group of individuals that we deal with, rather intensively, go through a program which is based on extensive job analysis so that we have identified the critical dimensions that lead to success in that job. What we do is put these people through two days of simulations. They are evaluated, they are appraised as they go through those two days. The result is a developmental plan. We know where an individual has some developmental needs, and we also know what their strengths are. We do this so that an

individual can plan their education to increase the effectiveness of time utilization. Time is critical for these people. The next step of the developmental process is to assist the individual by identifying means or areas where they can satisfy that developmental plan. It may be training programs, it may be university programs but more than likely it's job assignments or special on the job programs.

In industry we state that an individual's development does not take place in the classroom. I don't know what percent does. It might be that 85 percent takes place outside the classroom on a well designed job with a supervisor who is interested in that individual. Four steps: self awareness; career awareness; a developmental plan; and a method of achieving the plan. Let's fit postsecondary education/work programs into those developmental stages. As I mentioned before, I'm sure it fits into the career awareness phase and it may fit into others. According to the directory of coop education, published in 1975, the educational advantages of students in coop programs are these. First, students find greater meaning in their studies. It increases student motivation because it connects reality with what's in the classroom. There is a greater sense of responsibility. An individual develops a greater dependence on their own judgment. There is a greater understanding of other peoples skills--human relations skills. They are definitely oriented to a world of work. But by being in these programs they know more about not just what the job is, but what the career is all about and what the pay offs are. If those things don't fit in nice and neatly with the developmental process, then I think we have a problem.

Postsecondary programs, coop programs are of excellent value. In fact, industry pays a little bit extra to the graduates of some of these coop programs. When I'm trying to propose a new program at Kodak, I'm asked several questions: what is the objective of the program, what alternatives have you considered, what are the costs of these alternatives, and how do they meet the objective. And then prove it. The last question is, is there a better way to utilize the existing limited resource? For example, since the coop experience for one student benefits only that student, would the coop experience for a teacher or counselor benefit more people. What's the cost benefit analysis picture for postsecondary education/work programs. If we can answer those questions, I think you will be able to direct businessmen and get them more involved.

Our experience with coop programs is good. As I mentioned, we pay a premium for graduates. The students do not have a difficult time in making that transition from education to employment, their feet are on the ground and their heads aren't in the clouds. A well planned program, one that meets your objectives in providing a full enriched life which makes an individual knowledgeable about careers will succeed.

out of trade school, etc. The Mayor of Denver, as well as the Mayor of Colorado Springs, have come to the Governor and requested what we need to do is fine tune the level of information that we have available in Colorado so that we can anticipate when there's going to be a downturn in the educator market. When there is going to be a downturn in any of a number of areas which we have no idea about today. I think that that is a proposal that has significant attractiveness from the standpoint of Colorado Springs and Denver.

The third area of priority is one of recognizing the fact that very frequently you have very specific target groups, such as President Carter has identified, that have their own unique problems. We have focused approximately $100,000 in this third area to deal with the problems of such groups as the Colorado Migrant Council, the Manpower operation down on the Rocky Mountain Boute Reservation, youth employment in the Denver metropolitan area, and looking specifically at what other proposals might come in from whatever sources. We have not obligated any amount of this money. We're still in the thinking stage, and I would encourage very strongly that if you have specific ideas on how it can be better spent, we need that type of input.

Additionally, I'd like to share with you what I see to be coming from the federal level, because I think that the implications are that we are going to have dramatically greater dollars coming through in the short term. Not only in the form of tax rebates, but also in the form of public service employment dollars which I think is going to be very significant if it is channeled in the right direction. I have a great deal of difficulty with public service employment in and of itself. Particularly if it leads nowhere. Conversely, I think it is one of the best things that can possibly happen to us if in fact we can actually train a person over the course of the public service employment. I am hopeful that we can recognize that it's not a single sort of proposal that is going to be coming out of the Department of Labor at the federal level. I anticipate that President Carter is going to be coordinating the HEW, Department of Education, as well as the Department of Labor because I think he recognizes the very definite need to coordinate the dollars in the form of block grants and in the form of specific directives that do not in fact deal with one specific state agency. I anticipate the public service employment dollars in the State of Colorado will more than double over the course of the next 12 months. That could be one of the biggest problems that Colorado has ever faced if we don't recognize the need to have the assistance of the labor community, the employer community, the educator community.

What we really need to do is focus on the problem. Once we've focused on the problem, I think we need to resolve it in a way that is not only meaningful to the person who analyzed the problem, but also meaningful to the general public.

Session III
Thursday, January 27, 1977

MY PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EUDCATION/WORK

Lou Carson

My position on occupational education is that I am in favor of it and have a great sympathy towards the vocational student and instructors in the program. I have an extremely low tolerance for poorly motivated students and instructors, and I have an extremely lower tolerance for poor programs.

I have been asked to make a few remarks about the relationship between postsecondary education and "organized labor" in the area of apprenticeship. I'm not speaking for labor or management, nor am I speaking to the pros or cons of apprenticeship, I'm merely trying to clarify some misunderstandings about apprenticeship. There are very few people who know much about apprenticeship. First of all we must clear up one important thing: in the State of Colorado, we have four types of apprenticeship programs. One is commonly referred to as group joint programs. This is a group of contractors and a single union. They are the sponsor of an apprenticeship program. Second, is the individual joint program which is one employer and one union. Third, is the individual waver program where we have an individual employer and a union and one of those two organizations has waved their rights to participate. To date, in Colorado, the only waved rights program we have are those that the union waved their rights to participate in. No management has ever waved their rights. The fourth program is the individual nonjoint program where you have a single employer and no union participation. That is a program sponsor. If you don't get that message, then I'm sorry I came. If you will notice, none of those said this is a union program. These programs that you and I and most other people commonly referred to as union programs, are group joint programs. When that apprenticeship director from that program walks into your institution and starts talking to you, he represents a joint committee; half labor and half management. He does not represent union alone. There are six men on most of those committees, and occasionally a woman. The management half contains hundreds and hundreds of contractors.

Let me give you an example of this type of program. The program that we fondly refer to as the electricians program is really a joint program between the IBEW and the NECA organization, which is the National Electrical Contractors Association. There are hundreds of members to that organization. It's a shame that we're not more educated in the area of apprenticeship.

The two extremely important controlling factors in an apprenticeship are the apprenticeship standards and the committee. That committee has the authority and the power to do all kinds of things. Those are the two operating functions. It's not the union, normally it's not management--it's the apprenticeship standards and the committee. One of the questions asked many times from the postsecondary institutions is, why the training provided by postsecondary institutions cannot be used as part of an apprenticeship program. Keep in mind that there are different types of apprenticeship programs. You can't make a blanket statement why can't it be accredited. Let me give you an example of a section in most apprenticeship standards called "credit for previous experience." I want to read you a quote from a program that is functioning in the world:

> Apprentices having previous experience in a trade must substantiate such claims. At the discretion of the company, this experience may be evaluated and the term of apprenticeship shortened. This credit may be given either at the beginning or at a later date.

That quote is taken from the patterns standards of the Colorado Apprenticeship Council. This is one of the guidelines that a program gets to start with. Here is a quote from a different type of program:

> Apprentices who receive credit for previous experiences shall be paid the rate of the period to which such credit advances them.

That program sponsor had one thing in mind, and you can bet that was a joint program, because some union man said that he wanted to make sure that when you promote this guy, that he gets his present rate of pay from where he is promoted to.

Credit for previous experience may be granted after the evaluation by the committee at a trial period of not less than 30 and not more than 60 days. With the agreement of the employer, credit may also be granted for completion of a related technical training.

In my position we talk about RI constantly--Related Instruction. Related instruction, classroom or home-study, those things a person learns not necessarily with his hands. There is a provision in this particular standard for that. Those programs could give credit for previous experience from a postsecondary institution if the committee so chose.

Now comes the program that has had some bad experiences. They write a more lengthly and complex situation.

Credit for previous employment work experience...(That's the heading--that gives you some idea of what they are going to say later. They've decided right away; they're not going to give you any credit for going to college, vocational school or anything like that) as related in this program may be given by the committee. If an applicant wants to be considered for credit for previous work experience, the applicant must make a written request to the apprenticeship coordinator within 14 days from entering the program. The apprentice must supply acceptable written proof of any previous employment experience and must demonstrate to the satisfaction of supervision and the committee, acceptable abilities in this area. Only by the first 90 days and by the end of 180 days will credit be given. The credit must not be less than six months and not more than two years. A review and recommendation in regards to the types and amount of related instruction courses must be compatible with the work experience.

That program has a lot of problems in taking people in that said, yes I've got experience and they falsified letters and pulled all kinds of tricks. This quote seems to take care of the problem.

Under the first two programs, you get some credit--up to six months. Under that last program, your student will never get any credit. To complicate things, in this credit for previous experience field, in a newsletter dated September of 1976, the State of Colorado's electrical board (the group which issues liscenses to electricians) made the following statement:

The Attorney General's ruling confirms that the state electrical board may only register apprentices that are registered with the apprenticeship council division of labor.

The reason for that is very basic. The electrical board wants to know when this apprentice is starting to work. That starts his time running for them to determine when he can take his electrical exam. The two assistant Attorney Generals servicing the Labor Department and the Regulatory Departments have had some different interpretations, and the Attorney General says, this is the way it's going to be. That ruling by the Attorney General really put credit for previous experience in the electrical trade in a position where it will be almost impossible to receive. That apprentice to become an electrician, must be working at his trade at least four years.

Most credit is given at a six month block. Apprenticeship program, this means 2,000 hours of work and 72 hours of related instruction. Not just any type of work and not just any type of related instruction. They all have a work schedule. If a program specifies 40 hours of blueprint reading in their program, and your institution gives him 80 hours, the most he can get is 40. Nothing will change that except the committee. If you look at your program and you can find 2,000 hours of work and 72 hours of related instruction, that individual can get credit in some programs.

Apprenticeship has two major distinct groups. The group joint committee, which does almost everything for themselves. They have their own training facilities, their own income, they do their own dictating, they will ask a few favors from outsiders, but normally it is a very close knit group. The other group is the group of the individual apprenticeship programs. The building trades group joint program account for about 65 percent of all the apprentices in the State of Colorado. That is the group that takes care of their own backyard most of the time. There are 35 percent of them that we really are not paying much attention to. If you keep in mind that we have four different types of apprenticeship programs, 65 percent of them belong to that building trades group.

There is some constructive criticism for the educators. Your classes have poor class attendance and you really don't care. Poor course content is also a problem at times. Many times your course content is poor because you've been advised poorly. Qualifications of instructors are both good and poor. Passing grades are questionable. I am always shocked at what some institutions permit people to do to pass a class. Passing grades are a very tough thing to handle. The ratio of students to instructors is too high. The maximum ratio in the state apprenticeship programs is 1 to 3 journeymen. You can have one apprentice for the first journeyman and one for each three thereafter. You people are dealing with 28 people in a class and I almost cry when I see that. Then we get back to actual productivity time in the class. I've heard many students through the years say, hey, I went down there and it's a ball. I don't have to work, they don't care. All of these criticisms are not true of all institutions, it is not a blanket. All we are saying is that those are some areas you need to take a good look at and give some serious thought to.

If an institution really wants to improve it's relationships with apprenticeship programs, I recommend they assign some person to really get to know something about apprenticeship. That person in turn give guidance to the staff. Don't concentrate totally on the group joint programs.

If vocational schools really believe in skill craft training, and apprenticeship programs, they have a poor way of showing it. In the state of Colorado today, there are only two apprenticeship programs registered to any school system. I don't know how many institutions we have in the State of Colorado, but it's a large number. You people in vocational education are saying you don't believe in the system enough to have an apprenticeship program in your own institution. Many of you didn't know you could. If your present institution employs skilled craft journeymen, and many of your institutions do not employ them, you may be able to pursuade that institution to sponsor an apprenticeship program. This will give you some first hand experience in apprenticeship, in operating procedures, and it will also give you some job opportunity.

Session III
Thursday, January 27, 1977

MY PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK

Dean Lillie

I believe that Colorado's community colleges have developed appropriate occupational education and they've been developed by many persons in the audience.

Fragmentation of programs and services is necessary and required to meet the local needs we have in our state. I believe that a variety of teaching and learning strategies must be employed in order to meet both student's and employer's needs. Another issue is salary vs. no salary for education/work experiences. This particular issue appears confusing.

We need to continue efforts for in-service of instructors and for in-service of administrators involved with these programs and services. Return of instructors to the business industrial world. I would recommend an increased effort in "public relations" and knowledge of what these efforts are designed to do.

I expect continued and increased funding for community colleges to deliver these types of programs. Community programs are delivering these types of programs. With in-service training and a better selling job and continued efforts towards standards and policies, we can eliminate many of these problems.

(The following material was prepared by Dr. Lillie for inclusion in the final proceedings.)

I. My perceptions regarding postsecondary programs/processes/services relating to improving, expanding and/or installing postsecondary education/work programs.

A. Background to my perceptions--cite a quote from the law which created the Colorado State Board for Community Colleges and Occupational Education and the State system of community colleges.

1. The Community Colleges and Occupational Education Act of 1967 states in the legislative declaration that "It is further the intent of this article to develop appropriate occupational education and adult education programs in these (two-year colleges) and other postsecondary institutions, and to develop workstudy and on-the-job training programs to acquaint youth with the world of work and to train or retrain youth and adults for employment."

B. My perceptions are then cast against this statutory framework.

1. Colorado's community colleges have developed appropriate occupational education and adult education programs. Additionally, these institutions have developed work-study and on-the-job training programs as well as other education/work programs and services designed to acquaint youth with the world of work and to train or retrain youth and adults for employment.

2. Addressing my perceptions further though, I am struck by what I would view as a MAZE of education/work programs and services due to the variety of activities identified as education/work programs and services.

a. We observe

1. Internships with business, industry and other employers
2. Practicums
3. Cooperative education

4. On-the-job training
5. Clinical experiences
6. Other laboratory experiences
7. Work-study
8. Perhaps others

b. Accordingly, difficult to walk through this maze, but I believe the alternative approaches are necessary to the improvement, expansion, and installation of postsecondary education/work programs and services. How else will community colleges meet the expanding and changing needs of students and the business/industrial needs of our State?

3. Another related perception deals with what might be described as fragmentation of programs and services.

a. I readily admit this is only a perception, but in fact I would again maintain this fragmentation of programs and services is necessary and required to meet multiple needs

1. I believe that a variety of teaching/learning strategies must be employed in order to meet student and employer needs. Such strategies are vital to achieve what I believe to be the purpose of education/work programs and services--A mastery of competencies which are learned and taught in classroom settings and then actually applied in a real setting prior to formalized gainful employment.

4. A fourth perception relates to the issue of salary vs. no salary for such education/work experiences.

a. On the surface, this issue appears confusing

1. Examples

a. Trinidad State Junior College Building Trades Program--Classroom instruction at the college. Laboratory experience at a college job site building a house--Credit--No salary

b. Morgan Community College--Swine Program On-the-Job Training Classroom instruction at the college. Laboratory experience in the industry--Credit--Salary--two reasons:

1. Not possible to replicate facilities at college and private sector providing a service to the community college.

2. Actually contributing to the enterprise--salary

b. Summary of my perception on the issue salary versus no salary for the experience gained

1. Laboratory training within college facilities where replication is possible (welding) against the impossibility of providing facilities at the college (health occupations).

2. However, issue of salary vs. no salary does not settle against this framework. Thus, the key appears to be when the student leaves the educational institution's confines and contributes to the enterprise and is compensated. Nevertheless, confusion still results because in certain instances (e.g., health occupations) the student is contributing in a clinical setting but oftentimes is not compensated. Issue still open from my point of view.

II. My expectations of and recommendations for community colleges in better serving the needs of a adult learners through improved, expanded and coordinated efforts.

A. I have purposely collapsed expectations and recommendations into one part of my presentation because I found it difficult to separate my thoughts.

1. First, and most obvious, I would expect and recommend expanded efforts in the delivery of education work programs for students. It is through these types of efforts we continue to meet the individual and collective needs of students and their current or prospective employers.

2. Continued efforts for in-service of instructors and administrators involved with these types of programs and services is required.

   a. Return of instructors to business/industrial world
   b. Continued liasion with advisory committees and work station supervisors
   c. Interaction with colleague instructors at other institutions
   d. Interface with University teacher education programs
   e. Perhaps others

3. Expect and recommend increased efforts in "public relations" in order that a variety of interested parties and decision makers can be more properly apprised of what these efforts are designed to do and the results of such efforts.

   a. Although these types of activities are viewed as required, necessary and traditional in occupational education--they are viewed in other sectors and places as nontraditional which requires a continual "selling" job.

4. Continued efforts directed toward improvement and utilization of postsecondary education/work program and services standards

   a. Being developed, applied and refined (January 1977 draft)

5. Expect and recommend improved efforts directed toward definitions, credit hour/contact hour computations, work-load identifications, other policy determinations and the like related to these programs and services.

   a. State Board FTE Guidelines

6. Bottomline--I expect and recommend continued and increased funding for community colleges to deliver education/work programs and services.

III. Summary of my perceptions, expectations and recommendations

A. Perceptions--

1. Community colleges are delivering education/work programs to increasing numbers of students in increasingly multiple ways and settings.

2. There is an evident maze, fragmentation and confusion relating to these efforts, but the efforts are necessary and required to produce educated and trained individuals to the employers of our State.

B. Expectations and Recommendations

1. Expect and recommend expanded efforts in the delivery of education/work programs for students

2. Further in-service for instructors and administrators of such programs and services

3. Better "selling" job

4. Continued efforts concerning standards and policies

5. Funding

C. Finally, in summary, I believe that education/work programs and services in the community colleges of Colorado are vital and in many ways these activities provide an implementation of what I believe to be a key principle in occupational education--Cooperation between business/industry/employer and public educational institutions in the educating, training, and eventual placement of graduates. Without such cooperation costs would be prohibitive and/or certain programs and services would not be possible. Thus, these efforts are notable and laudable.

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MY PERCEPTIONS, EXPECTATIONS, AND RECOMMENDATIONS FOR COLORADO POSTSECONDARY PROGRAMS OF EDUCATION/WORK

Gordon Bourne

Right now I am working for the State of Colorado in the Office of Human Resources. I am a member of the SPAARS team. SPAARS is a real special effort on the part of the federal and the state government working together in a cooperative program looking at the problems that are being faced by individuals that have needs for public kinds of services.

My first career was in the military. I did come away from that with some excellent skills. One was that of an administrator. Another is an understanding of people and human needs. I also had a chance to look at people, the methods with which they were being trained and educated. There has been one thing that has been pervasive in my careers in the military, at Colorado Womens College, and now with the State of Colorado, and that is opportunities for people to be involved with the real world and real entities as a means of learning.

We learn approaches being taken by industry and by the community colleges and by the full universities to do these things. We have tried to take a close look at this, especially at Colorado Women's College. We had the experience of working with three levels of society simultaneously. There is a great deal of similarity between the levels of our society and the way they look at their problems and the way they look at the whole idea of preparation for life. We did find out that whenever there was a problem that the counselors in any one of these areas could not deal with, that we look to the value of having them to interact with a little reality as they were trying to learn. I found out through my own experience that one of the most valuable resources that we have are the resources that we find in our own community. We find out that we can have a decent mixture of the academic and the practical then we have an opportunity for the student to be graduated with a degree of competence that cannot be gained from any other kinds of things. By doing this at the college we were able to find out that one of the first steps we had to do was to make this a very realistic and honest part of the whole school activities. After that, we found out that the next big step was to get the undying, and honest, and truthful support of the community and the community leaders in particular. From that particular point, it was relatively easy to put together advisory groups so that the experience that they were having in the community was real experience. Real practical opportunities. When a student is exposed this way, they start to feel that they are not being led and not being isolated in the classroom anymore but they are having some opportunities to participate in the whole learning experience and also to be in touch with reality. For this reason we have also used the same technique in dealing with students on both ends of the spectrum. The very practical person who has lived a great deal very close to poverty, as well as those who have been so called blessed with a lot of this worlds goods. They still need this level of guidance if they are to participate in the "real" world. My role now in the Office of Human Resources gives me an opportunity to be involved in a number of responsibilities. We are still dealing primarily with the problems of poverty within the State of Colorado.

John Lay mentioned some of the approaches that we have taken in the office. One of them was to help to put together a council in an attempt to work together so that monies and the personnel and the resources could be used in a much more productive kind of a way. Another element of the office has to do with, what is the interest of the poor in the State of Colorado, and how can we best address it. We have found that in most cases the condition of the poor can be improved by concentrating with their own community resources and bringing in other kinds of resources necessary to improve them economically, educationally, and, to a degree, also socially. We are asking people to look about and first of all take advantage of those things which are surrounding them and appreciate them. We've found that by inspiring people at all levels, to look about them, take advantage of what have, and to pass on to others their experiences, that the entire situation is taking on some perspective and has encouraged us in this particular effort.

Regardless of where you find yourself in life: whether its the activities of a military organization; or that of a finishing school environment; or that of striving young people to get the best out of them;

there appears to be at least one particular thing which can be beneficial to our citizens, and that is to keep their one foot in reality while you educate them.

Session III
Thursday, January 27, 1977

FORUM BETWEEN SYMPOSIUM PRESENTERS AND SESSION III PANEL

Dorothy Lawrence, Moderator

I would like to welcome each of you back and it is my pleasure to be with you this afternoon. This project is one of the most outstanding programs of the year. The objectives for this afternoon are to ascertain the perceptions, expectations, and recommendations of individuals in key leadership roles in Colorado regarding Postsecondary Programs of Education/Work. If we really can do that this afternoon, we will have in fact identified the problem; and we want to come up with constructive recommendations for consideration for implementation. That has to be an outstanding feat for two hours.

I would like to express some ideas for consideration. I would like your responses on them. One comes from a statement from Leonard Lecht of Manpower Development of the Seventies. He says, "Priorities in a democracy are determined by decisions of firms, trade-ins, and consumers and also by legislation enacted at all levels of government, rather than by experts." We talked a little about it this morning when we talked about legislation and the reason for the importance of the education/work concept. In reality it is the consumer who is going to direct priorities in our society.

Another thought that I would like to throw out is that perceptions related to education and work involve more than the knowledge and skill training in vocational education. We hear that employers on our campus say the knowledges and skills are important but, more important are the attitudes of the world of work.

It is a fantastic experience to think about the ethnic perceptual changes that have taken place in our society in just a few generations. The perceptions of the students, the faculty, the administration, the staff, and the employers will in fact affect training and the employment activities in all aspects. I am very much for that direction and trend.

Q: Two things I think are quite critical. One is the paid versus non-paid cooperative education type of program. Another thing is that one of the limitations to this whole program is the number of training stations available and this is becoming increasingly prominent because of the economic crunch. I would appreciate it if you would react to this question. Is indeed the economy effecting the availability of training stations and what is your reaction to paid and non-paid cooperative education programs?

A: I am just speaking from my experience. We have fifteen coop students working for us and that is a paid operation. I agree that non-paid work experience is okay. Next year my budget might be different, and I might not take fifteen students. Also, that most of the resources in the communities are not as big as where I work and don't have fifteen work stations or don't have the same profit margin as we do or had. Some places can't afford to put the person on full-time basis and pay them.

Q: The idea about educational work experiences for teachers and counselors was brought up this morning. I am aware that Kodak has made an attempt to do this kind of thing. Could you explain a little about this and how you perceive this to work for the small business person?

A: I think vocational education still has a little black over its head. It is not excepted in a lot of areas. I believe, one of the areas is in teacher preparation institutions like CSU, UNC, CU, and so forth. Those are the areas where the teachers ideas about including career education concepts are formed and where the administrators are being trained with the attitudes they have right now. I feel those people should get a share of industry by working with us and using a well designed program like the one at UNC might be even more worthwhile. The counselors spend three to four weeks in industry working beside machinists, eating lunch with them, working with an engineer and learning their skill. We really don't have this in Colorado and this is a direction we should take. The other group of people we have to work with are counselors. All are well trained in advising students to go to college. The teachers are trained for teaching and not for instructing students on how to get along in the business community.

C: I would like to make a point on teacher education training. There was a workshop held last summer that was paid for by the business community. The workshop was on economic education for teachers. This does show that some businesses are willing to take part in these kind of programs.

Q: I would like your comment on how we can meet the needs if we are slated as an open-door institution and we must take people that come to us into our program. I think that is a critical issue as we compare apprenticeships and the programs we are attempting to put forward in community colleges.

A: I think there is a gap in that area because you can't have open-door education without open-door funding. The grade level does not really have anything to do with who the student is or who he isn't, it is a matter of policy from the stand-point of the institution. Can the institution make the rules and then can the institution remove the student from that class.

Q: You said we don't know how to counsel adults. I wonder why we don't know how to counsel adults and is anyone in the state incorporating specific emphasis on counseling adults through graduate or undergraduate programs. Is your department doing anything to promote this concept?

A: I don't know anybody who is doing anything specifically in the area of adult counseling. The state department does not see it as their responsibility.

Q: What kinds of plans do you see in the area of placement?

A: We have got to be concerned with the placement process. We have to be concerned with the intake process and the counseling that is necessary to help students in their career decision making but we certainly can't drop individuals once they have completed a training program. We are still in the process of analyzing the new law.

A: Those kind of issues of placement and counseling are made at the institutional level. We had additional resources for support services. This is one of the areas that has been severely eroded. In order for us to be accountable for the resources that are provided, we had to have resources in order to effect accountability systems within the state. In order to document our case more adequately, there would have to be a resource allocation to those kinds of support services. Those areas are easily cut when you come into a tight budget situation.

Q: Have there been any meetings or dialogues with the Department of Labor in terms of funding that particular kind of activity?

A: Yes, there has been. The Joint Budget Committee comes to the bottom line figure on what the operating budget of the community college is and then they determine the sources of funding.

A: As I caught the drift of your comment, it had to do with funding and as you indicated, after all is said and done that funding is the critical issue and I agree. We have tried so many different strategies in the past several years in order to deal with the funding issue. Don McInnis was making his budget presentation in front of the Joint Budget Committee and one member of the Joint Budget Committee asked him why he was advertising his services at the college to the people in the community. He made a very good response in that he said, "We're trying to acquaint the people with the services that we have to offer." The funding techniques, there's a lot of conversation that state now over the conversion of the FTE full time equivalent basis to contact hour basis. My view of that is that it may more adequately describe the cost. Your faculty works 16-20 hours a week in occupational programs and McInnis' faculty works 24-26 hours a week. The workload issue has got to be encountered. If we don't encounter it internally, it will be encountered externally in the event that collective bargaining comes to this state. Whatever the funding technique, it's going to cost more money. How do we deal with that may be the thrust of your question. We need to deal with it together. If we agree on what our priorities are, then go together to see that they are funded, whatever the funding technique may be.

C: I would like to comment, at least from my own perspective, the funding whether it be on FTE or contact, is not accounting for the purpose for which we are operating the programs. I request that the consideration be given to funding on the basis of the nature of the institution and also

on the nature of the program. For instance, I have on our campus some of the high cost programs that have not to date received adequate funding based on the nature of the program and the one example would be that of the heavy equipment. We also have commitments made with other institutions that are beyond the nature of the funding provided. I think that as long as Colorado does fund on the nature of the institution, and by that I am suggesting that I believe that community colleges are different in the nature of purpose and in the nature of students, they should be funded at a different rate than other institutions of higher education, specifically University programs. Occupational programs are different in the nature of the program and should be funded at a different rate and basis than should the programs at the community college level.

Q: As we move along and begin to find the tax dollars being harder and harder to come by, and some of you wanting to reduce some of our tax bills in some ways, some of the futurists have predicted that the resources for meeting peoples needs are out in the community and some of those communities are the business or industry communities in terms of providing more resources for the training, equipment, spaces, and so forth. We are beginning to feel the pinch in terms of whether or not we can afford some of the kind of equipment needed for training. What kind of reaction are we going to get out of the business or industry as we begin to ask you at Kodak to provide training facilities and equipment as a resource?

A: Is that realistic? I have 16 instructors working with me on an area of 32,000 square feet, we run 94 classes, we have some machine shops that would love to have them, I'm sure. We are already doing part of that job. I think what we have to do is to work together like we are with Aims. We teach 94 courses in our vocational area. Aims comes to the plant site and runs some of those courses for us. I think we can create a partnership so that you don't end up taking the brunt of the cost picture. We just do not ask Aims to teach our process control program, which is a four year program, because just the simulator alone cost $16,000. I don't think it is the public education's responsibility to do that job for us. I want to protect my turf and you people in education prepare them for the world of work. We do the specific training that have the expensive cost involved.

C: Along that same line, in the section of the adult needs program, the part on business and industry in the state of Colorado responded favorably to providing not money but what they owned already. It was a high level of return that said they would articulate (people) what they wanted and when. The atmosphere was favorable; people would come out and say exactly what they wanted and then would supervise it. We have appeared many times with the Joint Budget Committee and I hate to be talking about those guys, they are pretty nice guys when they are not in room 334. The industry should be doing that kind of training at no state expense. We have got to be very cautious with that approach because there are persons who would say, beautiful, turn it over to industry and let them do the whole nine hours. Industry pays heavy taxes in this state, too and they are entitled to the services of the public institutions as much as anyone else.

Q: You talked a lot about involvement and cooperative efforts with the business industry and labor. As educators, how can we improve the communication and articulation between the public schools and the postsecondary institutions in regard to such projects as education work, work study programs, this type of thing. I feel there is a definite gap within our own educational system in communicating and articulating what is happening in the postsecondary level, what happens in the public school, the needs and this type of thing. Do you have any ideas or strategies on how to improve this?

A: No, I would retreat to some of the things Don McInnis said in his comments that we have not until recent years paid enough attention to other kinds of experiences persons have had either formal or informal, whether it be in the secondary schools or in business and industry. Education has taken the view that Lou advanced, in part, that the only way you are going to benefit from this experience is if you have it right there. I think we backed off of that position where the community college in this atate are getting all kinds of credit for previous experiences, whether formal or informal. I know for a fact that in certain occupational programs in the secondary level, arrangements have been made for the direct interphase of those courses at the secondary level goes right on out into the world of work. There is no simplistic answer to the question.

Q: Would there be a possibility that such a conference as this where we have representatives from business, industry, labor, postsecondary, that we could also include people from local school districts, counselors, to also have an opportunity to interact as we all have?

A: I think it's beautiful. One of the other things we have going for us in this state, is a lot of areas in the state have designated vocational schools which means they are teaching both secondary and postsecondary right within the facilities at the postsecondary institution. So, a lot of the problems of ten years ago, I think, have diminished because you have an instructor teaching part time secondary and part time postsecondary. A lot of the articulation issues are being resolved. I would agree with the bringing in of more people. The more time that we can communicate with each other, the better off we are in terms of dealing with our problems.

Q: How many persons annually are accepted into an apprenticeship trade in the state of Colorado, such as for 1975 or 1976, in a specific trade, such as an electrician or electrical trade?

A: Electricians and plumbers are licensed trades--it makes a great difference from a machinist. The group joint electrical program had 400 applications for a possible block of 40 jobs of which they took 20 at the mid point of last year. Whether they will take the second 20 or not is very unlikely because they have several on the bench, as they call it.

Q: The second part of the question, is, what are the odds of a postsecondary applicant of getting into the apprenticeship program in Colorado?

A: About a thousand to one. It is really difficult to get into an apprenticeship program. One of the reasons is, you people don't sponsor any apprenticeship programs. Two school districts in the whole state of Colorado have apprenticeship programs. I'm not talking about classes, I'm talking about a real apprentice walking around eight hours a day learning his trade and taking his "144" hours of related instructions at some institution or some place latter on. We don't have as many openings in the apprenticeship field as we should.

Q: What do you believe to be the value, personally, to employees and or the company from involvement in coop education? Also, do you have any comments for those in education who may need the talk about coop to prospective employers?

A: I have a brochure entitled "Employer Experience in Cooperative Education." It's published by the Detroit Institute of Technology. I think it will answer most of those questions. You might want to refer to that. In dealing with those 15 kids from Windsor High School, we start out with a bunch of kids and end up with a group of adults. The value is one student making a success out of his life. The value of the program is the kids.

Q: What is the present organizational structure for education/work at the postsecondary level? What commitment or change would you propose for education/work, especially coop education?

A: Let me take the last half of the question first. I think as a community college president in this state I would be willing to commit myself to the stand that I would like to see all of the occupational programs in El Paso Community College involved in some type of cooperative work experience. We at the community college level, can show a person what the skill or area is like that may be as far as we can go, but I feel that the person who makes some decisions on their own, shows us how to deal with it in the classroom. I think the cooperative work experience of OJT or whatever you want to call it, should be essential; should be a prerequisite of graduation for that completion certificate for any of our occupational programs. I don't see how we can correctly inform both business and industry and our students about what the world of work is like unless we have an opportunity to get them out there in the world of work. I think the state has got to recognize that we are going to have to cooperate more with private industry, to get more training slots. I would disagree with the statement made this morning that the instructors business is to see how the student is doing, I think that is maybe about a fourth of it. I think the coop work experience provides an opportunity for the colleges, for the post-secondary institutions, to be right in tune with industry. We have to put up some sort of standards in our programs that would give us assurance that our product is going to succeed when they go out into the cooperative work experience situation. I don't think it's fair to business and industry to send everybody out. I think we have to face the fact that we have to grade, like Lou was suggesting, tough enough so that when they get that guy on work experience program or coop experience, that the person will succeed. You can turn out a lot of people who don't understand what's going to happen their first day of work, and I think that's a big mistake. What was the first question again?

Q: What is the present organizational structure for educational work at the postsecondary level?

A: The structure right now, I feel, is pretty well headed up by Bill Woolf's shop at the state level. I think we have a lot of encouragement from the state board staff to develop cooperative work experience programs. I think we need a lot more. It appears to me that the impetus has been established at the state level, I'm not sure how many of the institutions are following through.

Q: How many of your programs have educational work experience filled into them and how do you fund them?

A: Probably about 50% at this stage of the game. We budget through release time from the classroom which hurts us when we come down to that student faculty ratio. It releases time from the classroom for the supervisor to go out into industry.

C: I'm not sure any of us have a program spelled out at the community college level. Northeastern is doing some things, and we have just initiated coop education. I think somewhere along the line we have to get to the point where every student has the option of combining education and work. I think we need it for two reasons. I think it is important that they know what the work world is like. Secondly, an initiative we haven't addressed very well. We are trying to address it through career education.

Q: What happens to a person who comes to a two year community college with the intent of going on to a four year university, and doesn't. Yet these people may have a good background in English, Communication skill, Science, Math, whatever--how do they translate that in the work world? I don't think we are making any provisions, at least in Colorado, at this time in terms of addressing the so-called general studies academic student in meeting their needs both as a transfer student or for those who do not transfer. I think it is a serious problem.

C: Didn't we hear of a learning for life program where they are in fact taking liberal arts students and putting them out in the community for work experiences?

A: Yes, like in New York they require that every student participate in cooperative education to get a degree.

C: I do not see at our campus 50% or more educational work programs. We do have some educational work programs that are good and very valuable. I am committed to the concept that we have heard verbalized with great consistency that I am right now even fighting battles with a few teachers that tell me laboratory is not an essential part of the practical, more applied theory. I think there are some perceptions in the minds of some of the faculty that are not committed to the concept as idealistically, at least as I've heard today. On our campus, we may be not as good administrators as some of the rest of you, but we really do have dollar problems and that at least is one of our rationalizations on not having more work programs out in the community. A major need in the state in order to really address this issue is state-wide cost effectiveness data of the programs. We do have some educational work programs. They are not in the majority of programs, but we would like to have them this way.

C: I think your area vocational schools have these same problems of funding and staffing to offer these kinds of services and would be just as commited to the concept. I think another thing that maybe we didn't mention is how many people can they take in the industry?

A: We are willing to finance education programs in view of other programs whose worth has been proven.

Session III
Thursday, January 27, 1977

SUMMARY AND OBSERVATIONS

Raymond Wasil

Mr. Wasil began his summary by quoting from an article based on a study that we as taxpayers paid 1.8 million dollars. The results of the study indicated that there are two types of fools in education, the one fool is the person in education that says that because something is old, it is therefore good. And the other one is a person or institution that says that because something is new it is therefore good. The article goes on to talk about the fact that any school system that is willing to try anything or everything is a losing proposition, and that perhaps the best school system is a system that looks at what it has and has the support of its students and faculty. We have always had cooperative arrangements with industry, it is not new or unique or anything of this sort. The question at hand is, how can we better expand those, how can we meet the needs of even greater numbers of students, how can we do it with the least amount of expenditure and the most efficient use of funds, both funds from industry and funds that we may have or resources. How can we look at priorities? Then we should allocate our time and other resources based on those priorities. If this area is a priority, then we are going to give of our resources to make it a reality.

I agree with Mr. John Brennan, Director of Adult Education, when he talked about the need to provide educated people, particularly educated people who care. He talked about G.E.D., about looking at priorities, about shifting over resources, and working with the adult population. He also talked to greater utilization of senior citizens' resources.

A few of my observations are: perhaps we are concerned more with maintaining systems and protecting our old little educational structure than we are concerned with what is good for education overall, or what is good for the economy or for the students themselves. I do not think that academicians understand the vocational world.

There is a need for quality checks to be made on work-study programs. There should be a concern for employer input. For too long, we are educators have educated our young people, provided them with training, and then we pulled back and said that now we had done our thing, go out there and do yours. We haven't communicated with industry in terms of what their needs are, their immediate employment needs next year and five years from today. If we did, we could do a better job on planning the types of programs and training for the young people we work with.

The Federal Government needs input from people in education, they have not been getting it. They may have been getting some from education lobbys, or from other professional organizations. However, we must either impact those lobbys and professional organizations or look at another route to take to obtain our goals for kids. Legislators listen to the big cities who combine their efforts and force changes. There is some concern about the federal role and the state role in education. There is enough for all of us to do, however, is to get it done. How do you divide up the pie of responsibility? Everyone agrees that there are a lot of things to be done, we all agree that this type of a program is good, industry should be involved. If we involve business people, they may force us to do some of the things that we as educators are so good at verbalizing. Business people can go back and help educators put ideas into operation. They can commit time and money to it, to ways of implementing our ideas and then they will come to us and say, "let's move." If that is the case, then we had better be ready to move. The most effective approach used is one in which we work together. We have communicated each to death, now let's collaborate. We need to focus on the individual student needs, and we need a strong guidance program. Otherwise we will be wasting a lot of our funds and resources.

There is a great deal of misunderstanding about apprenticeships. They vary from state to state and they are very difficult to get into. There are thousands of applications and very few students are accepted. Another consideration is to start looking at the training programs in your institutions. You serve as trainers for people who are going to be working all over the world. This is an area where you need a communication system, so that you are aware of job opportunities in areas other than just your community or state.

Many people have recommended expanded efforts to meet students employment needs. There is a need for student employment in-service training for teachers as well. Many teachers have gone through programs which have not prepared them for this type of activity or involvement and they are going to fight you tooth and nail just because it's new and it's different. I think that there is a need for communication and in-service with some of the secondary training institutions. Those people should be aware of what is being done. There is also a need for in-service for those people who are in business and industry. In a number of states, within the states or at the state level, they have industry education committees. These are made up of people in industry and from people in education. Public relations, there are all kinds of resources available through industry and public service organizations. Not many publications talk to work education, education/work or any of that sort.

A few more of my observations are:

--We need to expand on what is already happening, particularly, those good things and we need to publicize them.

--We need greater coordination within the institutions and between the institutions. Also, greater coordination with business and industry without duplication.

--There is a need for collaboration between institutions and between various levels of institutions of training in the state, both those above and below us.

--There is some concern that is going to have to be given for career education. I saw some turfsmanship appearing in the meeting. I saw that protective type of thing. The only way to get over that is through a little bit more collaboration and cooperation and identification needs.

As you develop and see of one problem, be assured that another problem will develop. There is no simple solution and there is no end to it. I relate to a story about four people climbing a mountain. One of them wore very expensive shoes that did not fit, so the individual complained that his feet hurt all the way up the mountain. The second one was a jealous individual and he kept wishing for this house or that farm or that piece of land out there. The third one kept looking at all the storm clouds and worrying whether he or she was going to get wet or not. The fourth person was an individual who was not caught in his or her own experiences. That person was climbing on and looking to higher things. We can almost look at some of the opinions and views that have been expressed during this week and categorize some of them into those four categories.

SESSION IV

SESSION IV

January 28, 1977

Objectives:

*To increase an awareness of federal legislation regarding postsecondary and adult vocational education.

*To discuss with national and state leaders programs/projects related to postsecondary career assistance, placement, and follow-up services.

*To provide an opportunity for all conference participants to attend UNC's 49th Annual Mid-Year Education Conference.

FRIDAY MORNING

8:00	General Announcements Notebook Handouts Introductions	Dr. Louise J. Keller
8:15	ADDRESS: "Career Assistance and Placement Services--A Report from Triton College	Dr. Gary Hinrichs Assistant Dean School of Career Education Triton College River Grove, Illinois
9:00-9:30	Open Forum with Dr. Hinrichs	
9:30	15 Minute Break	
9:45	ADDRESS: "Education/ Work--Recommendations/ Strategies Challenges for Postsecondary Institutions in Colorado"	Mr. Raymond A. Wasil Director, Division of Testing and Guidance Ohio Department of Education Columbus, Ohio
11:00-11:30	Conference Post-Assessment Closing Remarks, and Adjournment to UNC's University Center--second floor ballroom for the Vocational Education Luncheon and UNC's 49th Annual Mid-Year Conference.	Dr. Louise J. Keller

Session IV
Friday, January 28, 1977

CAREER ASSISTANCE AND PLACEMENT SERVICES--
A REPORT OF TRITON COLLEGE

Gary Hinrichs

I think this conference is rather timely. As I read the Chronicle of Higher Education the other day, I read an article that said, "Colleges are still weak in vocational training--employers complain." A researcher up in Michigan found that higher educations' expanding interest and relationship between education and the world of work still lags far behind the requirements of major employers throughout the nation According to the survey, most employers don't think that the colleges are giving their students enough practical experience for them to work in the working world.

As we approach National Vocational Education Week, which is February 6 through February 12, I have reflected upon the goals and the purposes of education. To me it has been oftentimes expressed that the highest aim in education is the development of the qualities of character. Or, in teaching honesty, integrity, and justice, respect for person and property lies the hope for domestic tranquility and goodwill--the basis for progress.

One of the most significant dimensions of life is work and the interfacing of education and work is more critical now than ever before. Career education benefits all students for in some point in time, we must solidify our educational and work experience and direct our energies toward making a contribution to society. Career education believes that learning occurs in a variety of settings and, therefore, requires a relationship between business, labor, and industry, and the professional community to provide learning experiences which are not typically found in the academic program.

Triton College, which is located in suburban Chicago, caters to about 23,000 students at this point. There are over 80 different occupational programs. About three years ago, we submitted a proposal to the Federal Government to study the world of work and how placement fits into the educational scheme. I'd like to present to you this morning a visual interpretation of how Career Assistance and Placement (CAP) has been developed at Triton College, and then follow that up with an interpretation of a model that we created as a result of the CAPS project.

In the summer of 1974, Triton College in River Grove, Illinois, applied for a research grant through the Department of Vocational Education and Rehabilitation in Illinois to research the general area of placement in secondary schools, Community Colleges, and the Area Vocational Schools in the United States. Triton was awarded the phase one contract for the 1974-75 college year. This permitted an investigation into placement and ancilliary services. A survey was conducted nation wide. The results were tabulated, studied, and other related literature was examined. On-site visitations to out-of-state exemplary placement services were also conducted. This comprehensive survey resulted in the Career Assistance and Placement Services Manual. A combination of research findings to date. A philosophy of the manual is that placement of Adult Vocational and Technical Education choose five sites to field test this manual to ascertain the practicability of this approach for Community Colleges and secondary schools. Triton College was one of these sites. Briefly, Triton College has some 23,000 students (full- and part-time). It has university transfer studies in 28 areas, 100 career education programs, and adult and continuing education programs. To meet the diverse needs for such a variety of students, the CAPS model offers many career development ideas, and methods for finding employment. The manual is divided into five segments and is oriented to assist the reader in instituting a career placement program, coordinating the placement program with other segments of the school or community, assisting the student in making a realistic career choice, helping him or her in selecting a job, and evaluating through follow-up the effect of the CAPS program on the institution. As a result of the CAPS project, Triton has expanded the job opportunity bulletin. This is a listing of jobs called in by employers. The bulletin has wide circulation to students, local high school coordinators, counselors, faculty on Triton's own campus, and employers. In return, coordinators send job opportunities to the placement services. Potential employers receive a bulletin and a self-addressed, post-paid postcard asking if Triton students were hired. In this way, a follow-up study can be made at a later date. Job listings are limited to equal opportunity employment situations. A placement advisory committee was formed from a broad cross section of industrial,

business, health services, and governmental agencies out of the need to keep in touch with the contemporary society. This type of committee could represent large and small business, state employment service, senior citizens, students, and health facilities. Through the efforts of this advisory committee, the traditional career day of Triton has undergone a change from a broad monster to a carefully segmented experience, closely associated with career clusters. The future holds a series of concentrated career days for specific interest groups, such as health careers, and business careers.

Another technique used successfully by Triton has been the employer survey. Approximately 700 of the employers surveyed through this method have responded. From this, Triton has developed an employer data bank. Thus, the placement office has an effective tool to determine what and where the jobs are available in the 23 communities served. As well as an indication as to what opportunities are available in specific groups such as handicapped or those students who have not acquired skills.

Potential employers are also contacted through a free service wire indicating what services are offered by Triton. Briefly, these services are that an ad can be placed in a job opening bulletin (over 1200 of these are circulated each week.) These ads are placed on bulletin boards throughout the college, and circulated to department heads for distribution to the faculty who may know of a good job candidate. Secondly, if the employer so desires, a recruitment date can be set up. In addition, those employers in the data bank are frequently sent a copy of "Shot Gun" which provides the employer with a brief vita of the student--his/her skills, academic achievements, and the kind of employment desired.

Another facet of CAPS influence is the Career Corner. The Career Corner was arranged to consolidate significant volumes of materials gathered in phase one of the CAPS project. For students concerned with career development, printed and non-printed materials abound. Counselors introduce freshman students to this area during their college orientation course. However, the career corner is open to anyone within the college or from the community, who can benefit from the services. The Strong-Campbell interest test is given to anyone who takes advantage of the Career Corner. Other tests, such as the Personal Orientation Inventory, are also available. As a joint effort between the placement advisory committee and Triton's placement office, a job clinic is offered each semester. It's purpose is to develop techniques in the process of applying for a job. Information is offered on dress, preparing a resume, and interviewing techniques. In addition, staff members visit career education classes prior to graduation. They provide assistance in the preparation of credential files and advising students as to their lawful access to these files. These credential files are then compiled in the placement office and forwarded to employers upon request.

Perhaps the most important component of the CAPS manual is follow-up and evaluation. At Triton, yearly studies are conducted. Then the results are assembled in a report, "If They Tell Us, Will We Listen." This report has been distributed to administrators, department heads and curriculum developers. Such as the Occupational Advisory Committees. The purpose is to improve upon curriculum as well as the Career Assistance and Placement Services.

As a result of the CAPS project, the CAPS manual has been distributed through a series of state-wide workshops. This tool it is hoped, will assist small, medium, and large school systems to develop placement activities appropriate to their locality and circumstances. The ultimate result will be that every person passing through the academic structure in Illinois, both our colleges, and our secondary schools, will have the kind of help they need to put their education to work for them.

I hope that gives you a good overview of what we have attempted to do with the CAPS project. I suspect that one of the questions that you have now is, where do I begin. After much deliberation, perhaps three or four months of it, we found that in developing this program, the one thing that we had to overcome is the definition of placement. We couldn't come to an agreement and we thought that perhaps that was a good place for us to start. I would like to share with you the definition of the word placement as we see it. Comprehensive career placement services are those services through which the school assists students to develop and to implement their career goals. The types of activities required for comprehensive placement services at an educational institution are: Career planning, placement, employer interaction, follow-up, evaluation, and coordination. As the interface between career education and the world of work, as we interface them, these services emerge. Assisting the student to plan and implement career goals to serve the institution by

supplementing the evaluation of instruction and providing input for curriculum revision based upon student and employer experience. And finally, to serve the community by relating education to the realities of the employment community and measuring the accountability of the school in meeting educational goals.

Career placement at the secondary and postsecondary levels must be more than just an employment process. The CAPS model describes the systematic approach with the following components: planning and development, coordination, career development, placement services, follow-up, and evaluation.

In the beginning, planning and development requires the input from many sources. We have found from experience that the best single source of information is an advisory committee. Currently, I have 452 individuals serving on various occupational advisory committees. It is not necessary to have that many, in most institutions, but we have well over 80 different occupational programs. We find that the optimum number of people that you want to have on an advisory committee should be twelve. If you were to figure that formula out, you would soon find that many of our people serve on more than one advisory committee. The first stage in the development of a Career Assistance and Placement Services Program, is to identify people from the education community as well as the industrial community to provide you with the input you need in order to develop the program. I have given each and every one of you, I hope, a copy of the advisory committee handbook which I developed a couple of years ago. It is used primarily for the occupational advisory committees, but we have leaned on a number of ideas from it for use with our placement advisory committee as well.

Once you have established the foundation for the development of a career assistance and placement services program, I believe it is necessary to identify the key administrative officers who are going to lend support to such a program. We first got our advisory committee, got their input, got their support, and then we went to the administration to convince them of the need. However, a marshalling of facts never sold a proposal to anyone. Neither a company president, first line supervisor, or an administrator in a community college. It is a myth to believe that they will. While facts are important tools in helping you to gain approval for your new idea, never try to use them as a crutch. There is a place to use them, but planning is most important. A closed mind is not receptive to facts. You must remember this even though we have been trained to seek objectivity, facts, and decisions in everything we do. Because of this training we are able to develop systems that bring results. Of course, I am eluding to the fact that working with the advisory committee will help you to bring forth the support that you need for a program.

The third step in the implementation is, drawing together all of the resources necessary for the appropriate exposures that you want for your students. You have another document that I passed out, the Career Component Brochure. This illustrates some of the activities that we have had in terms of self-discovery, career aspirations, determining the various occupational clusters and careers that are available. Perhaps this document will help you in developing your services. According to Donald Super, Career Development is an on-going developmental process through the persons lifetime involving progressively consistent and realistic career choices. The acquisition of career choices, competencies, and attitudes. The comprehensive career assistance and placement services with a goal of furthering a students career development would then be concerned with providing services from early career choice assistance to assistance in placement into higher education for a job consistent with the students career goals.

Our fourth phase is the operations within the placement program. You will recall in the visual presentation that Triton has developed the Career Corner. Frankly, we have had a problem in that area. We started out with one counselor and a person, a technician, assisting students. We have not been able to hang on to these people. The overall placement operation has been pictured in this model and described in terms of the basic steps. We had a very, very difficult time in trying to identify appropriate forms, referral cards, placement activity type records. As we developed this whole project, we went out throughout the nation and we brought into our files examples of those forms and cards and procedures, practices and policies that we thought were exemplary and then we tried to identify, as part of this CAPS model, those things that could be appropriate for the small, medium, and large Community Colleges and Area Vocational Centers. It is unfortunate that I cannot share the examples of all these resources with you. We have something like 124 different types of resources within this manual. Currently it is not available for sale. The only people that have it thus far are the people that attended the state-wide workshops that we held in Illinois. (About 1500 people now have this in their facilities.) I suspect that the Department of Vocational-Technical

Education will consider a proposal that we have made to produce this on a larger scale and make it available throughout the country. Meanwhile, we are trying to disseminate some of this information to people such as Dr. Keller, and I am sure that she would be most happy to share some of that information with you.

The final phase of the CAPS model is the follow-up and evaluation efforts. Needless to say, we feel that an essential ingredient in the placement services activity is the follow-up and evaluation. We have found throughout the country that all too often when people conduct evaluations and follow-ups, the data then is bound and put on the self like many of our doctoral dissertations. We made a concerted effort to take the data, such as what we derived from, "If They Tell Us, Will We Listen," and then we distributed that to advisory committees, administrators, faculty, department chairpeople, anyone who was concerned with curriculum development. As a result of that follow-up of the follow-up, we have been able to make major strides in terms of curriculum development. That has been reflected in the fact that every year our catalog, at least half of it, is revised totally.

One of the things that we were concerned with, of course, is as you develop records in a placement services area, not only do you have to be fully aware of the Buckley Amendment--one of those obscure laws that says that all records must be open to students--but we found a lot of schools are having a difficult time in coming to grips with that. The manual outlines several alternatives for working through those guidelines.

In undertaking anything, such as a Career Assistance and Placement Services Program, it is most encouraging to make the best start possible--this builds confidence. Deserve it if you can, then forget it and begin fighting for the applause that count--the applause you get after you leave the stage for a fine performance. Your success with placement services will be an incombent upon your ability to adapt to change, your desire, your talent, your teamwork, and certainly your self-confidence. I have faith in this particular group because I've got a feeling that after you leave here you are going to put into action some of the things that you have learned.

Questions and Answers

Q: What is the extent of the vocational instructor, participation, involvement, responsibilities as far as the placement program is concerned?

A: I think most people would agree that in the past most placement activities would call up X instructor and say "hey, I'd like to have an individual who is compotent, has 25 years of experience, but is only 20 years of age," and the faculty member will try to identify someone that fits that particular need. Through this project, we have been able to impress upon faculty the desirability of their having first hand knowledge of what is going on in terms of placement. We encourage their participation on the placement advisory committee, we have encouraged them to serve in other capacities on the career development committees, and frankly, we have used them in our follow-up to a greater degree than in the past. We have found that many institutions, for instance, in their follow-up will send a form from a particular office and try to get follow-up on the graduates. We took the same type of form and then had individual faculty members sign the cover letter. The result was about a 37% increase in the follow-up from the graduates. They are very active in the placement services.

Q: What kind of return do you get from the follow-up?

A: We usually find that we have to go three passes in order to get 36%. By three passes, we are talking first paper, then phone calls as a follow-up.

Off the top of my head, I would have no idea of the percentages as to how many to on to the university for the baccalaureate degree, how many have gone to the military and so on. With

23,000 students, we're talking about 900 graduates a year. We've been in business about 12 years, and I think our first graduating class had about 200, so we're talking about well over 10,000 people I would guess that have graduated. I could speak in terms of career education and not the college in general.

In the school of Career Education, on this last evaluation/follow-up, we had about 62% of the people that graduated went into the work force. About 27% which was unusually high for us, went on to the universities for baccaluaureate degrees or a few went to other technical institutes, which really surprised us. Perhaps they were in one kind of career cluster and they were trying to move into another, such as, we have a dental assisting technology program that some of the gals went on to a dental hygiene program at another technical institute. Very few people were found to be out of work, at least those that responded. I rather suspect that those that did not respond, many of them were indeed unemployed.

Q: Which gives you about a what, 30-40% employed in a field when they went to work?

A: Of the 60% plus that were in the world of work, a real high number, something like 80% went into a field associated with the area for which they were trained. One of the things that out of the 80 occupational programs, there is only one program for which less than 50% of the graduates went into a field other than for which they were trained. That was Advertising Art.

Q: You mentioned about three passes.

A: Usually post cards or telephone calls--whichever seems to be most convenient. For those outside of the direct calling area, we use post cards, for those within the calling area, we use telephone calls.

Q: What rate of response do you get from these follow-up services.

A: I believe it was about 56% on the first pass.

Q: When did you send the forms out.

A: Prior to our changing those forms, by the way, from where we went on a massive mailing to independent department type mailing, our response was significantly less. Something like 27% for the first pass.

Q: At what period after they leave the institution do you follow-up?

A: We have a one, three, and a five year plan. One year after graduation, three years, and then five years.

Q: What number of no returns--is that a high percentage?

A: Not as high as we had anticipated. We tried when we had the manpower to go to relatives if we can, friends that we know of that were in the class, for instance, if we are doing a follow-up with a particular individual and we know that that person was in a highly concentrated area such as Dental Lab Technology, we might ask the question, "Do you remember John Jones, what has happened to him, etc."

Q: Do you make your services available to non-graduates as well as graduates?

A: Yes, the Career Corner is open to anyone who can benefit from the service.

Q: With 23,000 students, how many are in non-occupational programs.

A: Currently we have 6,882 students in career education. (Vocational, technical, business, and health career programs.)

Q: That means you have 17,000-18,000 students in a non-occupational program which means there must be a lot of faculty serving those students. Do you provide in-service to those people with your CAPS project. Are the non-occupational faculty in any way involved with CAPS.

What is happening to those students and those other faculty who don't have maybe direct access to what you are doing?

A: Of the 17,000 about 4,000 are universities transfer studies students. The other 13,000 are in the adult and continuing education programs. We currently have 957 part-time faculty, we have 222 full-time faculty and about 30 administrators. Each year, with the part-time faculty we have an in-service program that amounts to four-years of graduate teaching methodology in four hours time on the first night. We then have a series of in-service programs throughout the semester on a voluntary basis. Those in-service programs address themselves to the methodology, placement activities, media, and others. We do have a program but it is a one shot type of thing, once a year, primarily for part-time faculty. In terms of the full-time faculty, almost 50% of them are career education. The other 50% are in the university transfer study area. I would say that if we are deficient in anything, it's in-service for the university transfer faculty. We have not really had much of an effort there.

Conceptually, I realize that vocational education is not career education, and visa versa. We tend to take in our institution career education as a generic term. Perhaps it should be the other way around, but in our institution, it has been established that career education is the umbrella and within that you will find the trades and industry, vocational, technical, and health careers. We also have a very small industrial arts education program. It is more of a special service to some of the universities in the area that do not have that kind of a program. They may have a baccalaureate oriented student who they want sent over for one or two or three technical classes. So we have a series of classes for them.

Q: We are always looking for better ways to improve or do better. Looking at your situation, if you want to increase your placement efforts and get more people on jobs, what would be your next step or your projection.

A: I'd like to add more staff. We have found that with every highly successful occupational program there is a coordinator of that program. Our organization is such that we have a Dean of the School of Career Education, and a Assistant Dean of the School. Below that, there are department chairmen and coordinators. The difference is that department chairpersons have some teaching responsibilities. Coordinators are quasi-administrators and have no teaching responsibilities. They simply are a program coordinator. It is those people that have the more successful programs. Because they can get out there and they can encourage new students, they can encourage the employers, they have a lot going for them. I have a coordinator of Apprenticeship Training. That program started out about four years ago with less than 12 students, and now I have 380 students in the program. It is primarily because of the efforts of a coordinator. In those programs where I don't have coordinators, very low enrollments, money to employ additional staff, perhaps I would adopt a system of organization that would have a lead teacher concept of maybe a program coordinator other than the way we have them now. I rather suspect we would have much better results.

Q: Do you have a placement officer as such.

A: Yes, we do. Tomorrow we may not.

Let me take a look at this structure with you. We have a woman that is the Director of Financial Aids and Placement. Under her she has, I would call them, two Directors. Our institution has two positions for directors--Director of Placement, and Director of Financial Aids. Beneath the placement officer there are three individuals. One that would be more of a clerk, one that would be a technician, and one that would be a counselor.

Q: What is the role of counselors in this whole picture?

A: Quite frankly, when we embarked on this project the counselors were not very happy. They didn't like the change that would perhaps come about. But in the long run it worked out to their advantage. In fact, what we have done essentially is put together all of these regional and national resources that they can draw from. I might also point out that in the state of Illinois there is a computerized system called SITIS. Perhaps you are aware of it--it is the computerized vocational information system. It was developed by high school staff in the western suburban area and it has had quite a bit of success. In effect, it is a data bank that is used by counselors

and students in the process of career development or decision making for a career. It's rather interesting, a student can address the computer and draw any kind of information on salaries, prognosis in terms of prospects of jobs, or what kind of training they need to enter a particular field. It has only one drawback and that is that it is not truly localized. The data is national in scope. You might pull up something on oceanography and it may say that the job opportunities are very good. That may be true down in Maimi but they are not that good in the Lake Michigan area.

Q: How many counselors do you have?

A: The college currently has 18 counselors. It is a decentralized system. It was centralized until about two years ago, and frankly, the CAPS project has sort of influenced it. We got the notion that students have direct access to counselors within the technology building, within the health building, within the liberal arts building, etc. Perhaps they would be utilized much bigger than they were and that has come to pass. Of the 18, I'd say about 9 of them are vocational or career education oriented and the others are university transfer studies.

Q: Why don't you have more than one person assigned to the Career Corner?

A: Simply a budgetary matter. We would like to have more.

Q: What do you expect and extract from your three and five year surveys.

A: One of the most important things to come down thus far, is an indication as to the content of the courses that we are offering. Whether or not it is relevant. We are finding, for instance, that larger numbers of people are interested in metrics. We are revamping our technical math program because too many students that have been out in the field for a couple of years now are telling us that we should have been aware of the fact that we are teaching things that nobody uses anymore--such as the slide rule. That information, of course, is then feed back to the curriculum committees.

Q: Do you recognize or use a negative response in order to get them back in that three and five year survey. You have an opportunity to contact negative respondants, do you use that opportunity to get them back into the institution.

A: No, we haven't. We've not made any effort along those lines thus far, but it's rather a good idea.

Q: How would a student obtain information about the immediate area, about the local area, in terms of job input, or job availability?

A: A high school in our district has that system and about two years ago, I went over there along with some staff that has expertise in the various areas. Throughout the summer, we up-dated that program to reflect what was really happening in the Chicago and metropolitan area. That is the only way you can really localize it. There is, through that Federal project, a company I believe out in New York, that develops all of this information. You subscribe to this each year and the only way you can localize it is to do it yourself.

Q: Most of your occupational programs have work experience involved with them and when they did have work experience involved with them, are you finding a higher consentration of students in those programs and more success with placement?

A: To the last part, obviously yes. I subscribe to that idea and have done so for years. If I had my choice, I would have a work experience program connected with every program. We don't, simply because of the cost, although the cost is, with this last contract, coming more to our liking. At one time, the faculty member got one LAG for every two students served in a work study situation. It doesn't take much math to realize that the total contingent that a faculty member would need would be rather small for a full load. With the last contract, there was a scale that changed. I think last year it was three to one, and this year it is four to one. With a four to one ratio, we are more in line with the derivative. I rather suspect that if we get it to five to one we'll have more work study.

Q: What is the student faculty ratio at your college?

A: Obviously in university transfer studies it is higher than it is in career education. I frankly don't know the UPS ratio. I would guess though, that it is about 27 to 1. That is, if you took all of their classes it would be that kind of ratio per class. In career education it is probably, this year, about 17 to 1 per class. Their total student to faculty ratio/load would be 40 students to 1, whereas in science technology, most of those classes run 35-40 students per class and the instructor might have six classes.

Our LHE is 14 to 16 LHE for a full load. Our lecture hour equivalent are simply one to one for the lecture and .8 to 1 for the laboratory. I am sure you can all figure that out.

Q: On the back of your pamphlet, you indicate the rank and the enrollment number and I am just wondering, for example, auto mechanics, in September it was ranked, it appears to be less students. Are you finding a relationship between that and what you are hearing from your advisory committee? Are they in tune to the employment opportunities, are they following this same pattern?

A: I think you are seeing less only because you are reading it wrong. You read it from the right to the left. Current enrollment, at least in October of 1975, was 356, in 1974 it was 252, and before that it was 178. In Automotive Technology, by the way, we turn away over 150 students per year.

Q: Have there been any examples of where the reverse is occurring and it has been anticipated through your advisory committee?

A: Yes, it happened in the electronics area. We were forewarned about three or four years ago that there would be a tremendous decrease in job opportunities in our area. Primarily because Motoroal was taking one of its plants to Taiwan, somebody else was going down to Mexico, and so forth. With all this data, we were able to anticipate a decline in the enrollment, and fortunately, we were about ready to hire another full-time faculty member at that time, so we put it off and we appreciated that kind of input. I believe in advisory committees, I love them dearly.

If you were to look at the profile of any program that we have, you would soon realize that in our institution, this is a raw figure, but I would say 76% of all career education students in everything but the health careers, 76% of them are gainfully employed in the industry for which they are coming for their upgrading or some kind of change. We don't, by the way, if someone is employed in a field comes and gets a degree and remains in that job, we do not put them down as one of our placements. That's where some of that other 30% that we are trying to account for lies. In the printing area especially--with the technology moving from letter press to offset to laser and those other technologies. We are getting more and more people who have had 20 years of established work records coming back for upgrading their training. Another thing that we haven't even talked about is the untapped resource that I think most schools forget and that is the seminars and the workshops and that kind of thing. We have put a great deal of effort into that in the last two years again as a result of the CAPS project. It is somewhat premature to assess what has been happening, but it appears that once a person has come to the campus, seen the facilities, can have one exposure, have a quality experience in terms of that workshop, they are coming back for more in terms of a degree or certificate.

Q: Do you ever take any of your people off-campus and run a seminar for the community?

A: Yes we do but we have some state restrictions, we have to stay within our own district. We have a very small district in terms of space. It is highly industrialized. We do have a lot of in-plant training which is another untapped resource. I can't understand why more schools aren't doing that. Our feeling is that if we can get 12 people together that want a course in mushroom growing, we'll offer a course in it. That seems to be our break-even point.

Session IV
Friday, January 28, 1977

EDUCATION/WORK--RECOMMENDATIONS/STRATEGIES/CHALLENGES FOR POSTSECONDARY INSTITUTIONS IN COLORADO

Raymond A. Wasil

Let me start by giving you an overview of some things and perhaps fitting it under the title of Music Man. The song in Music Man was "Know Your Territory." This will help us to know the territory as it exists now and the territory as it is developing nationally. Based on that, I will make my recommendations and suggestions for strategies and approaches that you can use.

A lot of this is taken from a report from U.S. News and World Report, September 6, 1976. The report is titled "Where is the New Generation Headed?" It talks about the rise of a new generation and that is the generation you and I are working with. It is a distinct and different generation from the earlier generation because it has been directly and very heavily influenced by television. It is a group--a young adult population--that has a lot more information and knowledge than the previous generations. They are the brothers and sisters and the offspring of those people who were the rebels on our universities in past generations; who rocked the universities a decade ago, the protesters, those people who were the adherents of rock music, drugs, and sexual promiscuity. This new generation, for the most part, looks at those things but really doesn't adhere to them. Many of our perceptions are based on those young people of two generations ago. We are functioning in our capacity as administrator, and so on, on that frame of reference.

This particular generation, in contrast, is practical in its goals and is extremely skeptical of authority. We are the authority--by virtue of age or by virtue of position, or by virtue of title. It is asking more questions than we have answers for. This generation is more practical. They think less about fun and self-fulfillment and the development of being an individual than they do about careers and jobs. They are a more pragmatic group. They are a more down to earth group in terms of: if I've taken some training, if I've taken some education; how will it help me to make training/education into dollars that I can use for the things that I want to do. We are talking about a generation that is not concerned with the job of working, or ways of getting out of work, but what they can do with the money they generate from that work and what training they can obtain at what cost so they can get those dollars to do what they want with it. I think in working with this generation in training institutions, we should be aware of this problem.

Many students are interested in higher education, continuing education, but not necessarily a four year degree. They are interested in careers. The greatest growth nationally is in those careers that relate to technicians and craft persons. An increasing number of them are looking at service areas. Many of them realize that a sheep skin is not necessarily a prerequisite to a guaranteed employment. They have learned that through the reports they read and programs on television and the newspapers, and so on. They are a group of people who read and have absorbed a great deal of knowledge but they are not radical in their idealism. They are concerned with politics in society and in contrast to previous generations, they are a group of people who are willing to volunteer their services and work among the elderly and disadvantaged groups (handicapped, EMR, and so on.) I mention this because these are areas you can open doors for work experience on a paid or non-paid basis. You will then have a base in the way these people believe. The girls still believe that marriage is the way to go but, they are looking for professional careers. More and more young people (19-40) will be coming back for training and for retraining--because we are talking about young women who will interrupt their careers for marriage when their children are young and then come right back at us again.

The baby boom has ended, and we all are aware of this. Today's college graduates are entering jobs and housing markets that have been saturated by the baby boom youngsters. Our economic growth nationally seems to be arrested and there doesn't seem to be much hope for it to clear up in the near future. You can look forward to nonstop inflation, rising scarcities of goods and a much lower birth rate. That goes back to the word referred to as LLL (Life Long Learning). We are going to have to provide the opportunities for these people, based on their needs, through your institutions.

Let me give you a few statistics that will come out in the report later. It is actually a profile of the population that you will be working with. You always assume that the income of the age group 14-21 was relatively large, but it is relatively small in terms of the U.S. population. A total of 46.9 billion of the young people ages 14-21, about five percent of all money income in the U.S. of those with income, 56 percent of the young men and 66 percent of the women, have less than $2,000 annually. In those ages about 56 percent of that population have less than $2,000 annually. If we are going to provide training for these people, then we are going to have to have forms of support for them. One of those forms of support could be monies generated through work experience or through coop. Males outnumber females by a small margin--24.2 million or 49.2 females; 25 million or 50.8 males. We have an equal distribution of males and females and that may have some impact on the programs that you are presenting. In terms of race, the whites are still the majority. Only 15.4 percent of the population within the age group of 10-21 are minority. In terms of jobs for those 18-21, 18 percent of the jobs are in service areas, 40 percent in clerical and 32 percent in service jobs nationally. In terms of unemployment, I will give you a breakdown in different numbers. Of those youngsters 16-19 have the highest unemployment rate of any group in this country. In the labor market, 34.1 percent of the teenagers were of a non-white background. This means they are willing and looking for work. The white population had 16.3 jobless teenagers. Our minority has the greatest difficulty in finding jobs. I think the federal government is going to be doing more and more about it.

We will turn to stereotyping now. In the group between 16-21, the largest number work as laborers, equipment operators, or as service workers. They are low level entry skilled types of occupations. Girls still most frequently work in office jobs as typists, receptionists, or take jobs as waitresses, or maids, or other types of service occupations. We have a stereotyping problem to overcome.

The rate of crime nationally is increasing. There are funds coming out of Washington for the training of juvenile delinquents. A person is a juvenile delinquent only when the judge says he is one. There are funds available for training programs for these young people and the most effective programs have been cooperative education programs. The young people also relate better to a more flexible type of school situation. They object to, and have fought, the idea of six to seven confined hours in a high school. They relate very well to the situation at a Junior/Community College, or a Vocational Institution because they see the benefit of the training they are getting first-hand because they learn something this morning and apply it this afternoon.

The theft in motor vehicles is 73 percent of all people arrested under 21. Burglary has 73 percent under 21. Theft and larseny has 63 percent, robbery has 58 percent, rapes has 37 percent, aggravated assaults has 32 and criminal homicides has 26. It sounds like we are developing a nation of young criminals. Maybe that is because they don't have anything else to do or don't see any help down the road. I think career training may be a way of working with them. With these young people, you have an opportunity, if you are strapped for money, to approach the juvenile justice department as the source of funds. The monies are there. The age group 10-21 represents 23 percent of our population but, by 1986, the projections are that they will represent only 18 percent of our population. Here we get into the Triple L again--the idea of training and re-training.

There are three areas where education is tightening up nationally. They come under three R's: retrenchment; results; and realism. The retrenchment part is a move nationally to get away from the frills of education. To get back to a more pragmatic approach in terms of what these young people should attain. There also should be a more effective use of funds. Those funds should be tied to goals or objectives.

Accountability is really stressed in the legislation for vocational education. Mr. Petty, who is the Executive Director of the National Advisory Council for Vocational Education, indicates that the legislators are extremely disturbed with the way vocational and career education monies have been spent. The reaction came up with the 1976 amendments that, in a few years, if congress does not see any results, you are going to see even more strong control placed on federal vocational or re-training monies. Either we produce it or they are going to look in another direction. There are two factions fighting for money now. One is the Department of HEW and the other is the Labor Department. There are only so many dollars and the Labor Department is saying, we can do a better job in terms of training with those monies than you educators can. I think we have a period of time in which we can prove it and if we don't then,I think we'll see strong regulations, strong legislation, that may cut many of us out of our jobs.

There is a great emphasis on teacher re-education in-service. They're not talking about another layer of teachers or personnel within the old educational structure. What they are saying is, if your teachers do not have the skills and competencies to do those things that are necessary, whether it be placement, career guidance, career education, or understanding of the needs of industry and so on, that there are monies that can be tapped for the re-training of these people. We don't need more, we need better. It is an emphasis on quality rather than quantity.

In terms of the second "R" they are very concerned about reading and writing. You are going to see more and more written on it and I know that some of your complaints may be "Gee, if they did a good job in grades K-12, we wouldn't have to worry about it now." Well, if your students can't read and write, it is your responsibility to teach them. If your instructors can't teach reading, then you may have to take and in-service those teachers in reading. There is also a move toward better penmanship. They are talking about remedial courses and monies being made available for remedial programs in reading and writing. It all goes back to one thing, in terms of results. If the federal government provides you with federal money or job training, are those young people who are receiving it being employed. What procedures, what processes do you have for follow-up, how effective are they, what is the cost.

The third one is realism. One concept is total community control of funds. Willard Wirtz has written the book Boundless Resources and in it he talks about total community control of funds. I cannot totally agree with him on this concept. I don't think it will happen that way. He also feels that Advisory Committees should not have money tied to them. I would recommend that you get the book and read it. It does indicate the philosophy of labor, and it gives you a good idea about what you are going to have to deal with. I think you are going to see direction given to you from this area. They are looking at education and its role in a different fashion than we have before. In the past, education has been looked upon as the instrument for social architect--all things to all people. We have looked upon them to solve community problems. The new approach is to solve some of the immediate problems dealing with our young population.

One of the problems is illiteracy. There are some clinics in San Francisco that are approaching illiteracy. In Houston, Texas they have an after school tutorial program. A word coming in as a process is pure guidance. It means having some of those people who are part of your training working with you and there to give pure guidance, support, direction, and help. They are talking again about reading and math being infused throughout the curriculum with everybody teaching it. In Philadelphia they are going back to the basics. A number of other states are getting involved and therefore, their money is going to be tied with teaching the basics. They are talking about proficiency standards in reading, being administered at various grade levels, and if your students don't perform well, your funds are being cut off. Again, regulation. Every time you accept a federal dollar, you are going to have regulation tied to it. Another thing is happening in some states, state dollars are being tied to these very basic types of things. What good is it to have a young person who is well trained as an auto mechanic if he can't read, if they can't figure out a bill. The educational institutions either do the job, or else. They are looking at education in terms of whether it can produce. There is a developing concern about job security. That is tied to the need for skills--if I pay money for certain training, will that training provide me with a job. This gets back to Lifelong Learning again.

There is an increasing concern on the part of the public and private leaders to bring young people into real life situations. More businesses are offering job training programs for you. There are a number of companies around the country that have worked through the Labor Department so they can employ 12 or 13 year olds on an experimental basis. Some of the rubber companies are doing it and they say it's a very effective way of modifying behavior and convincing young people to stay in school. There is an increased emphasis on working with the elderly and an increased emphasis on utilizing community resources such as the police department and cooping young people so they can get work experience. They are looking at one major problem nationally. I quote, "Isolation from the everyday world of work and the duties and socialization that goes on around work." Previous generations have been concerned about learning for learnings sake. Now they're talking about the feeling that they have that young people are being isolated from the everyday world of work. Where do they get the work experience and the feeling of socialization that goes on around work. This isolation has to be overcome. They are talking about the need to absorb these young people into society. In Chicago, they have hundreds of former dropouts, delinquents, and young adults who have criminal records up to the age of 27. They are working eight hours a day and fifty weeks a year in

a combined work experience program--half day school, and half day working. There are things going on all around our country that you can use as patterns. In Los Angelas, in the Mexican-American barrio, they are developing programs of service to the elderly and they are very effective. The elderly are also helping many of these young people. It's a two way street.

The U.S. Office of Education awarded the first of 3.5 million dollars worth of community grants for the establishment of centers to provide service programs for students of all ages. Another problem is that youth unemployment will not improve even if the economy does. We are going to have young people from the ages of 16-20 unemployed and no place in our economy to absorb them because of the baby boom population occupying the jobs and an increase in technology. Education will keep them off the job market for a period of time, if that education is worthwhile.

We have gotton away from the concept of start your own business--the little business. Everybody assumes that the only worthwhile work or the only way you can make money is by going out there and working for some large industry. There are a lot of opportunities for small service businesses to be set up. If you did a survey of your teachers to find what they do as to part-time employment, that might give you some indication as to where those opportunities are.

What is the feeling nationally, in terms of vocational education? Vocational education, and education in general, has been accused of educational devicesiveness. Jealousy and suspicion are everywhere in education. This is an area in which vocational education comes in for a heavy share of the blame. There was more effort spent on maintaining turfsmanship than there was spent on doing what was best for students. This type of disunity within the system will not do.

Another harmful trend in education is the old tendancy of educators to act apart from the rest of society. We have been talking all week about Education/Work, cooperation, communication, and over all that, colaboration. We can talk ourselves to death with communication, we can coordinate all types of meetings, but unless we colaborate together as mutual partners nothing is going to happen.

Vocational education will probably get more money from Congress to take on its newly important role in the fast changing society, but not to the full level of authorization of 800 million. In fiscal year 1978, we should be more politically active, active in terms of being involved and being informed and meeting with these legislators.

The answer is coordination and unified planning to locate careers and to prepare people for them. To provide them with skills useful for advancement is also important. The new law was a big step in this direction, a step which should be combined with a new attitude of cooperation throughout the educational community. You're not just vocational, you're not just academic--they won't buy that concept anymore. They never did buy it, but now they are becoming hostile about it and the hostility is being taken out on us in terms of money. What kind of money is coming down the pipe--$7.4 million for work study; $14.6 million for cooperative education; $6 million for innovation; $15 million for the disadvantaged; $30.7 million for consumer education and homemaking; $8.8 million for innovation in national priority programs; $1 million for curriculum development; $10 million for teacher training; $2.8 million for bilingual vocational education; and, $600 million for special vocational education study. These statements have been taken from Manpower and Vocational Education Weekly, January 20, 1977, and December 2, 1976.

There is not very much new in education. If you look back, we have covered everything in education. We have talked about individualized instruction and we can look at Socrates and look at what he was doing. You can look at the Greeks and their form of education. We talked about group guidance activities and we see that happening a lot. There is not very much new, it is whether or not we do it.

In the one room school, we had individualized instruction programs designed to meet individual needs, we had career education, we had vocational education, and we had individualized programming. We have got all of those same words and patterns with us, it is just a matter of applying it to society today.

When I was in school, I was taught that there were four great institutions in this country. One of those institutions was the church, and I saw the church ripped apart and fragmented. We take a look

at our government as the second biggest institution, both state and national government, and the same with Watergate and the discrediting of that as an institution. Then the family was the third institution, and I've seen the family fragmented nationally, and I wonder where these young people or these people that are in their twenties are going. And now it is our turn in education. I think the church did a bad job of defending themselves because they did not get it all together. I think the government did the same thing. I think the family started disintegrating, all kinds of things started happening and people were not aware of it until after it had happened. I think that by taking a look at these three great institutions, that we, in the fourth institution have a chance to make a difference by taking a look at the others. You are being bombarded with all kinds of negative types of things coming from the press. You can either fight them and become very defensive or you can ignore some of the things that you are saying and try and present them with information that is extremely positive. Most newspapers make their money on the negative types of things and spectacular types of things they say so that good solid news about the job you are doing in education may have difficulty in getting any recognition. We are going to have to become public relations minded, to make people aware of the good job you are doing. This can start with the people in your classes, and with the staff you have, or it can start with the relationship that you have with your community that deals with the communications--radio, television, etc. Use your advisory committee and your expertise. Do not ignore them and go along in your little education world waiting for the big bad wolf to come along and blow it out of existence. In the story about the little pigs, we should be the ones with the brick house.

We need something that we can look at and say, here is what we want to be, we may have problems but we can be this. If we go back and look at it and think and work for it, it can become a reality.

My first recommendation, is that we have the nucleus of a very good organization here. We should consider organizing a group made up of people to address your common concerns, develop a newsletter to share information among you throughout the state, and to plan for a continuation of this type of conference. I would recommend that if you do form this type of an organization or interest group, that you involve people in business and industry. If these people are involved, there is less chance of them striking out against you. You should also involve people from the news media, that way you have a good chance of getting your story told properly rather than misinterpreted.

In terms of investigating, I would recommend that you investigate, identify, and organize on a community basis. Identify a region or a district, and then organize the resources on a district basis. Look at a regional type of concept. You should contact employers and personnel organizations and state and local associations. There is a good publication put out in the United States that is available to you free, updated yearly, and it is called the telephone book. There you will find the people you should contact.

In terms of legislative action, get a copy of the federal register. Get in touch with your legislator or administrative assistant, get copies of legislation. Talk to them, tell them your concerns and perceptions as educators. You have a responsibility to go to them.

Identify the needs for your target population, the population you serve. You may be in an institution where someone is doing this with part of the population and somebody else is working on another part. Get away from the fragmented approach, get it all together. Make sure you all know what the other person is doing.

APPENDICES

APPENDIX A TERMS AND DEFINITIONS

EDUCATION/WORK

There are many terms used to describe the relationship between educational programs and work experiences such as cooperative education, work study, work experience, and work exposure programs. Mrs. Marion R. Craft, Postsecondary Education Program Specialist, U.S Office of Education, DUTE, recommended in a memorandum dated April 14, 1976 and marked "draft" copy that many of our terms and definitions have caused problems in data collection and communication. Her definition of education/work programs is given below.

> Education/Work Programs is an umbrella term which describes a variety of arrangements, either paid or unpaid, whereby students are involved in real work environments. It includes cooperative education, work-study, and work experience programs.

Based on Mrs. Craft's memorandum, reviews of the literature, and suggestions from the Conference Steering Committee the following major types of Education/Work programs are described.

MAJOR TYPES OF EDUCATION/WORK PROGRAMS AND THEIR DEFINITIONS

COOPERATIVE VOCATIONAL EDUCATION AND COOPERATIVE EDUCATION PROGRAMS

An instructional process which integrates the students' occupational preparation with a work-related experience. This school/community endeavor uses various scheduling patterns (alternating, extended day, parallel) to provide a paid employment experience in the work environment related to classroom instruction. The purpose of Cooperative Vocational Education is to prepare students for specific areas of employment. The following criteria identify this educational process:

(a) Institutional approved
(b) Classroom instruction
(c) Distinct education/work relationship
(d) Paid employment
(e) Specific job focus
(f) Cooperative Training Agreement and Plan

ORGANIZATIONAL PLANS OF COOPERATIVE VOCATIONAL EDUCATION

(1) Parallel Plan--A program coordinated to allow a student to work part time and attend school/college part time.

(2) Alternating Cooperative Plan--A program which allows two students to hold one full time position by exchanging work and study schedules.

(3) Extended Day Plan--A program for employees which permit them to participate in specially designed work/job related education.

WORK-STUDY

This is a school/college program designed to provide financial assistance through part-time employment with public non-profit employers. It is designed for students who require such aid in order to enter or continue their education in a vocational education program. The part-time employment may or may not be related to the students' occupational objectives.

WORK EXPERIENCE

An arrangement recognized by the school/college whereby students undertake employment experiences, generally paid, for a predetermined purpose. The work experience usually is not structured to meet an educational objective. The purpose of this arrangement is to allow students to achieve outcomes, generally self-determined, as an alternative to the regular school environment.

WORK EXPOSURE	A limited involvement program which provides students an opportunity for formal observation of career settings. The program provides students an opportunity for structured observations of on-site situations as well as association with community employers/employees and professional/trade/service organizations.

OTHER CONFERENCE TERMS AND DEFINITIONS

ADULT	Any individual beyond the age of compulsory school attendance who is not attending full time public school. In Colorado this is age 16 or over.
ADULT LEARNER	An individual who is over age 16 and is voluntarily engaged in some form of education/training.
ADULT EDUCATION	Instruction and services designed to meet the unique needs of individuals beyond the age of compulsory school attendance who have either completed or interrupted their formal education. Characteristics of this might be: (a) voluntary on the part of the learner; (b) more often part time; (c) under organized auspices.
ADULT BASIC EDUCATION	Instruction and services provided to individuals above the age of compulsory school attendance with emphasis on communicative, computational, and social skills to raise her/his level of competencies.
ADULT VOCATIONAL EDUCATION	Employment oriented curriculum/experiences for individuals beyond the compulsory school attendance age, seeking less than a baccalaureate degree.
APPRENTICE	A worker who is learning a recognized occupation in accordance with a written apprentice-training contract between him and his employer which provides for a given period of planned work experience through employment on the job, supplemented by appropriate related instruction.
CAREER	A lifelong process of the tatality of work that one does in his/her lifetime. (Super, Donald E. Occupational Psychology, 1970)
CAREER DEVELOPMENT	An ongoing process throughout the person's lifetime which describes the accumulation of individual behaviors related to work. In curriculum and instruction career development refers to planned programs which are transitional and may be cyclic for the individual learner (for example there are programs of awareness, exploration, preparation, placement, etc.)
CAREER EDUCATION	An institutional plan to enhance career development through (1) curriculum; (2) learning-teaching processes--includes work related activities; and (3) career guidance and related services--includes placement services.
CAREER GUIDANCE	An educational program responsible for assisting all individuals in the development of self-knowledge and interpersonal skills; in obtaining life-career planning competencies; in identifying and using placement resources; and in gaining knowledge and understanding of life roles, settings and events, especially those associated with family, education, work, and leisure. (Gysbers, Norman and Moore, Earl. 1974)
COMPETENCY-BASED EDUCATION	An organized curriculum within an instructional sub-system designed with prescribed performance objectives.
COMMUNITY COLLEGE IN STATE OF COLO.	A state or local approved institution designed to meet a variety of needs such as: transferable programs; occupational programs; community and personal service programs; associate degree programs; and certificate programs.

COOPERATIVE EDUCATION	A formal or informal instructional plan which combines learning experiences gained through employment in the community and related school instruction involving a three way partnership agreement among student, employer and educational personnel.
COOPERATIVE AGREEMENT	A formal document involving three parties: the student; the employer, and a representative of the educational facility.
COORDINATION	The process of visitation by a teacher-coordinator to a student's employment site and the combining of classroom learning experiences with on-the-job training experiences for the purpose of a smooth transition into the occupation.
EDUCATION/WORK PLAN	A written plan of education and work experiences, developed in a step-by-step sequence that a particular student will follow. The plan is developed with the student, by the employer and educator. It is prescriptive in nature for each individual student.
PLACEMENT	Implementation of a step in the education/work plan of a student involving employment, transition to another educational or training setting, or other career alternatives consistent with individual interests, values, and capabilities.
POSTSECONDARY INSTITUTIONS (as defined by the Adult VE Project)	Public supported institutions which serve adult learners and are classified as: (a) Junior-Community Colleges; (b) Voc-Tech Schools; (c) Local school districts with adult vocational education programs. For the purpose of this project higher education is not included.
TEACHER-COORDINATOR	A member of the school staff who teaches the related and occupational subject matter involved in education/work programs and coordinates the classroom instruction with the employment site training.
WORK	One's productive expenditure of time, energy, and capabilities for the benefit of self or others.

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APPENDIX E

Education/Work Programs for Adults with Special Needs

Don A. Brown*

All education/work programs are designed for students with special needs. If those served by such programs did not have needs which were unusual, they would be living and working just as other more ordinary citizens are. The definition centers on identifying the needs that are especially "special."

It is easier to attack that definition by stating what makes for a successful education/work client or student. We can be reasonably sure that he will be successful if he has the communication and psycho-social skills necessary to profit from the program. But as Mezirow found in his national study (1970), many participants drop out or attend spasmodically because they lack those skills and therefore have special problems or obstacles which limit their ability to gain from education/work programs. We say that such students have truly "special" needs. Needs to communicate more effectively, and needs to maintain, function, and present themselves equitably both psychologically and socially.

Without the ability to communicate well, the adult learner lacks the capability to profit from other instruction. He has to be able to listen, read, write, speak, and perform arithmetic computations or the work/education program will be a failure for him.

In addition, adults often have a number of complicated and interfacing psychological and sociological problems which limit their ability to take full advantage of education/work programs.

There is an interrelationship between lack of communication skills, especially the ability to read, and some degree of psycho-social self-sufficiency. Someone has said that knowledge is power. Yet those of us who are well-educated frequently are not fully aware of the truth in that statement. If we are frustrated by some circumstance, we can use our communication skills to improve things. The avenue to personal or group change frequently lies within our ability to express ourselves clearly, or to gain new knowledge through listening and reading.

In the same way, we have access to solutions for many of our psychological and social problems through reading and through discussion. Conversely, the individual who is less well-equipped with communication skills has more limited access to those solutions

For example, in the Buffalo study, 174 functionally illiterate adults were asked whom they would call to complain to if they felt that a TV or radio program was bad, that is, that it might hurt or offend someone. Only 28 (16%) made a fully appropriate response. Eighteen others said they would "tell someone" about it, but an amazing 127 subjects (73%) did not know what to do, made an completely inappropriate response, or said they would refuse to do anything about it--even though they were pressed to do so. (Brown, 1968).

Creators, then, of effective education/work programs need to be aware that many of the students or clients with whom they work need to have both basic skills instruction and help in coping more effectively with the many problems in their lives. Wherever possible, instruction in reading and math needs to be related to life skills education. Materials should be adult-oriented in terms of dealing with the information necessary for an individual to function successfully in our society. The setting for instruction should allow the student the opportunity to discuss his problems with those who may be able to help him. He should have the chance to learn what resources are available in the community to assist him with problems In short, the effective education/work program should be student-oriented, broader than vocational training, broader even than vocational training coupled with basic skills instruction. It needs to be a program which will help the participant learn how to choose, locate, obtain,

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keep, and get ahead in a job, how to master the basic skills which he needs to function on and off the job, and how to utilize the resources within his community and environment to meet his needs, to take care of his health, to provide for his own and his family's personal welfare and improvement, and to deal with the problems of psychological pressures of the job, home and community.

Materials

The materials used for basic skills instruction can be "tail that wags the dog." Instructors often feel they must follow the materials in order to be successful, so it is important to select materials which will support a good program Adults in education/work programs, even those adults who are functionally illiterate, are like other adults in their interests and problems, and their reading materials must reflect this. The Buffalo Study showed conclusively that childish stories, animal stories, and humor were least preferred among adult basic education students, and that they wanted to read materials dealing with jobs, personal improvement, family improvement, health and religion. (Brown, 1968). The Adult Performance Level study reported on in Adult Functional Competency listed objectives for adult functional competency in: (1) occupational knowledge; (2) consumer economics; (3) health, government and law; and (4) community resources. (Northcutt, 1975) In a press conference in the fall of 1975, Commissioner T. H. Bell said, "Adult education has to be reshaped so that students receive the kind of information that will make modern life easier for them." (Today, 1975)

We cannot separate instructional materials in reading from the adult need for information which will allow them to cope with life more effectively. Adult reading materials must be selected which will address those needs. Reading approaches must be utilized which will allow the instructor and the students to incorporate what he needs to learn as he is learning to read There is an old dictum that children must first learn to read, and then they may read to learn. Adults in education/work programs do not have the time to spare. They must utilize all the time they are investing in learning to their greatest advantage. Learning to read or learning to compute must be utilitarian for them Even at the earliest levels

Some materials are already available with which we can help adults improve their reading and at the same time help them learn life-coping skills. Other materials need to be written. And teachers need to become more adept in teaching reading through the Language Experience Approach so they can build reading materials which relate more closely to the adults with whom they are working.

Materials need to be available for the full range of abilities which the instructors will face within the program. It is common to think of reading as a subject which is isolated from the actual vocational or technical class instruction. In visiting a Job Corps program a few years ago, I had an opportunity to take a look at the instructional materials which were being used to work with Corpsmen in reading and technical subjects. Reading levels in the reading laboratory were reasonably well fitted to the students, most of whom ranged in ability from second through sixth grade level. But in the manuals and texts being used in the technical areas, the reading difficulties fell repeatedly within the eleventh through fourteenth grade levels.

The result of mis-matching the reading ability of a student and the reading difficulty of materials he must read in order to be successful in the program is two-fold. First, the reader becomes discouraged. He can't get anything out of his reading, and so he may try to circumvent the reading by asking questions, watching others, and listening carefully to the instructor and fellow students, or more likely he decides it's hopeless and quits.

But a second result seems less obvious to the teacher for some reason or another. The student doesn't learn effectively. Many teachers feel they "don't have time to teach students to read" because they're too busy teaching them the course content. The fallacy within that line of reasoning is that, unless the student can read the material necessary to the course content, he will fail to get much of the important information to be learned.

Albert J. Harris, one of the grand old men of reading, has said the most important single bit of information an instructor can know about a student is the highest level of material he can read successfully. A corollary to that is that he must then have the material available on those levels for the students. Otherwise it does no good to know the reader's ability level.

Therefore, to be successful in an education/work program, the instructor dealing with poor readers must be able to identify the student's reading level, provide materials at that level, and provide materials which meet adult informational and interest needs.

A few years ago, a lady working as a domestic for a household in Western New York was released from her job. She had been a good worker, had largely raised the family of children for her employers, and had been conscientious, but the family was grown and the couple for whom she worked no longer needed her services.

They gave her an excellent recommendation and even were successful in placing her in another nearby home which needed someone to do the same sort of thing she had been doing for the past twenty years. Unfortunately, shortly after she had been hired, her employer found out that she couldn't read or write, and he promptly fired her, presumably on the assumption that such a condition was contagious and therefore might be harmful and dangerous to his children.

Since she still had an excellent reference from her first family, she applied to the employment office and had no difficulty getting a position as a cook in a short-order restaurant. She was even more fortunate in that she was able to get on the good side of the waitress who worked her shift in the restaurant, and every time an order came in, the waitress would tell her what the order was, instead of making her read it for herself.

Everything went well until one day the waitress called in sick. A new waitress was called to take over the shift, a waitress who quickly informed the cook that it wasn't her responsibility to read the orders--only to write them. Chaos prevailed within half an hour. The boss was summoned and quickly terminated the cook's career as a short-order cook. She went back to the employment office, but the boss had already called and threatened mayhem for having sent him a cook who couldn't read, and they refused to send her out for any more interviews. Instead, they sent her to an adult basic education learning center, where she was told they would teach her to read.

When she arrived, the people in the school assured her she was in the right place. They gave her a placement test, and put her in the lowest group they had in the building. When she reported to the teacher, she asked that she just be taught how to read. That was all. Just be taught how to read so she could go back and get herself a job.

She worked laboriously for almost a month. She started out with the easiest materials they had and worked patiently. She read passages such as "Sam has a tan hat. Pass Dan the jam. The cat ran at the rat." She copied sentences saying, "The jack will hold up the car. You may use our jack to life your car." She read and wrote sentences such as "Ten feet from the hen was a red fox."

After about a month, she went back to the office of the learning center. She found the person who had signed her up and sent her to the class where she was going to learn to read. She said, "Mr. Smith, I want to learn to read." When he tried to console her that learning to read took time, and that he was sure she was doing very well, she stopped him. "No, Mr. Smith, I want to learn to read--eggs, bacon, toast, coffee, hash browns, ..."

It's a true story. It actually happened just the way you read it. But there's one thing that's unusual about it. She went to register a complaint. Most adults don't do that. Most of them simply vote with their feet. If they don't like the program, if it isn't meeting their needs, they just leave.

The material she was using has been used in literally thousands of programs to teaching reading to adults. But even though the counselor had correctly assessed her reading level and placed her at the right level, and even though the teacher had placed her in materials which were widely used and recognized in adult reading programs at that time, she had been misplaced and mis-diagnosed. She had specific needs which weren't being met. She had informational and interest requirements which were being ignored.

One of the safeguards in selecting materials for adult education programs is the selection of a variety of materials. Two years ago, the International Reading Association commissioned the study of various adult learning centers in the United States and Canada. Five model centers were identified and audio-visual packets were made illustrating the various practices within those centers. (Brown, 1974) One of the features of each of the five centers was the emphasis in each center on the inclusion of a large number of materials. Even in the Canadian center, which produced most of their own materials,

a sizeable proportion of their budget was invested in the production of a wide range of interesting, adult-oriented, informational materials not only dealing with instruction in the basic skills of reading and arithmetic, but also with life-coping skills. In the penal reading program included in the series of packets, the inmates in the instructional program read so omnivorously that at one time the program was in danger of running out of fresh reading materials. In the rural and home-study program, instructors had to literally carry libraries of the various materials with them to the rural learning centers and to the homes to keep the students supplied with books and reading resources. It is true that no one set of materials has been found that will teach everyone to read, but it is also true that in order for most adults to make strong gains in their reading ability, they need a number of materials, materials written for adult audiences, and meeting adult needs.

The Learning Environment

The setting for a successful education/work program is important. For most of the participants in such programs, school has not been pleasant for them in the past. If they are settled in seats structured in rows, with the instructor lecturing to them and guiding them through their "lessons" as a group with everyone on the same page at the same time, they are not apt to do as well as they might. Educational programs for adults need to fit into an adult atmosphere.

In the mid-sixties, it was relatively common for adult educators working with functionally illiterate adults to observe that these students were seldom willing to go more than a few blocks from their homes to the school where they were studying. Most adult basic education was conducted at that time in local school buildings--sometimes high schools, but often even in grade schools.

At about that time, an innovation hit adult basic education. It was decided that although functionally illiterate adults couldn't read well enough to fit into community colleges programs, it might be wise to see if they would respond to the more adult setting if ABE programs were placed there. They did. They broke the rules about not being willing to go more than a few blocks to get ABE training if they were placed in adult surroundings.

Then when adult learning centers were established--some of them in special sections of high schools, others in community colleges, some in libraries and elsewhere, but all, no matter where, all created especially for adult students--adults came to them in even greater numbers. They provided an adult atmosphere. They were not treated as "tall children." They were adults. They were able to study informally. They got up and took a walk when they wanted to. The school had recognized that they were like other adults and were able to make mature decisions.

Loosing the bonds of traditional formality in the school had some unexpected dividends. One student in the Adult Opportunity Program in Grants Pass, Oregon, told an interviewer that her greatest surprise concerning the program was that she could "talk to her teacher." Another said, "Our teachers have time to just sit and talk with us, not as people who are above us or better than us, but just like they were the same as us." (Brown, 1974)

Although Joe had been in an education/work program in Western New York State for several months, he seldom said anything. His teacher suddenly began to notice that his work was falling off. He had difficulty staying awake, and when he did participate, he seemed to have difficulty concentrating on what he was doing.

Formal inquiries as to the cause of his difficulties only seemed to make Joe more removed. Finally one night, Joe took advantage of the teacher's availability during a coffee break to ask him if he knew anything about law. As the teacher invited him to continue, Joe explained that he had been married for several years to a woman who had had to be institutionalized for severe insanity. She had been released once for a couple of days, but had had to be quickly returned to the hospital because of the seriousness of her mental disability. Joe was told she would never be released, and on the times when he went to see her, she seldom made any response, seemingly unaware that he was even there. He eventually stopped going to see her, and after about four years he gave up hope that she would ever be well.

At about that time, and possibly partially causing him to finally accept the doctors' earlier prognosis, he met a fine lady in the church he attended. He proposed to her, she accepted, and they were soon married. Enter Mother-in-law.

When his first mother-in-law heard that her son-in-law had married again, she threatened to expose him to the law as a bigamist, unless he signed over his house to her, "so that if my daughter ever does get out, she'll have a place where I can take care of her." Joe was beside himself. He explained the situation to his bride, only to find that she wasn't particularly happy about the situation either, and that more than a little of her unhappiness was aimed directly at him. She did agree to stick by him, however, if he could get things straightened out. The only solution Joe could imagine was to let the house go back to the mortgage holder so his mother-in-law would no longer have anything she could black-mail him for, but that didn't seem like an altogether satisfactory solution even to Joe, and certainly not to his new wife.

The teacher put Joe in touch with Legal Aid, who counselled him to annul his second marriage quickly, institute divorce proceedings from his first wife on grounds of her insanity, and then legally re-marry his second wife--all of which he did.

The point is, Joe was reluctant to talk about anything that was bothering him in the more formal setting of the rather traditional classroom set-up. But he was willing to talk about it in an informal situation.

That doesn't make the ABE student unusual. In a teacher training institute in Denver a few years ago, it was interesting to see that the participatns who were scheduled for formal conferences once a week to discuss their progress and reactions to the institute responded much better when the format was quietly changed so that the institute staff arranged to get together informally with each participant at lunch or over a cup of coffee to gather their observations. The first was frightening, or at least disconcerting. The second was enjoyable. And there was no comparison in the value of the comments received. In the informal situation, in which the participants were treated as equals rather than being "summoned to the office," they were not defensive, and their comments were both more honest and more helpful. Adults respond to mature, democratic treatment. All adults.

The communication within the classroom or learning center should reflect that mutual respect. One teacher in an ABE program was having a bad time with her students. They tolerated her, but they didn't like her, and they worked poorly for her. When the supervisor visited the program, they found one phrase used time and again by the teacher, "You people." It was almost measureable on a voltage meter within the room. Each time she used the term, the electricity increased a bit more. One student in talking with the supervisor after the class had been dismissed and the teacher had gone, confided that each day he determined to do the best he could to not let that teacher get under his skin. "But," he said, "every time she starts talking she makes me madder and madder."

In counselling with her, she was completely surprised that she even used the term, and even more surprised at the number of times the supervisor had counted her use of it.

In the Grants Pass center mentioned previously, each teacher personally calls each student who has missed more than a day or two to see if they are well, and to see if everything is all right. It pays off with both excellent attendance and an excellent teacher-student rapport. The lead teacher in the center takes time throughout the week to talk with each student having personal problems. It's a principle of good business management that one of the best ways to insure good employee relations is to take a moment or two and ask how the employee is doing, and, if he has one, how his family is getting along. The same holds true for good education/work programs. Gains will be greater, effort will be higher in a program where the student feels that the instructors and those in charge of the program care about him, a program where he feels a sense of belonging.

Staff Selection and Training

Staff quality is crucial to the effectiveness of the program. They must know what they're doing. It has become popular recently to cast aspersions on the value of teacher training. Different people draw lines at different places, but the proposition usually comes out something like, "It's a waste of time to get a (High school diploma, two years of college, bachelors degree, masters degree.) It doesn't make a person a bit better teacher. It just costs the taxpayer more money for salaries. After all, good teachers are born, not made." Such reasoning seems to be peculiar to education. No one seems to suggest that the surgeon about to open one's skin would probably be just as competent if he hadn't bothered to get the training obtained in surgical residency. Nor do we relish sitting in the barber chair manned by someone who would confide to us with pride that the only previous experience he had

had to this monent was trimming the family dog. Automibile agencies advertise for us to bring our cars to them because their mechanics have the best training available. The television reperiman tells us that he has to go to school every year to update his skills, and it makes us more willing to entrust our set to him.

A study ten years ago purported in its interim report to show that an untrained high school student could do just as well in teaching adults to read as certificated teachers. The final report, which went almost unnoticed, showed that even though highly capable, intelligent, well-paid high school graduates were matched against teachers who had failed to get a job anywhere else, and that although the presentation of the material was controlled so that the certificated teachers and the high school graduates were both supposedly saying the same things and presenting materials in the same way, there were no significant differences between the two groups.

There are a number of abilities which a teacher should have. He ought to be able to find each student's instructional reading level quickly and easily. He ought to be able to identify the readability of the materials he has for instruction. He ought to be able to use a Language Experience Approach where needed to teach reading. He ought to know the differences between the various reading materials and the various reading approaches so he can make a wise choice as to which will best fit the needs of his students. He ought to know how to use diagnostic tests and criterion referenced tests to assess both the needs of his students and the effectiveness of his instruction. He ought to be aware of the differences in the reading behavior of functionally illiterate adults and children who may be reading at the same level. He ought to be knowledgeable of the means by which he may teach word analysis to adults--and why he ought not to try to teach those skills the same way he would to a child. He should know the importance of context clues to adults learning to read, and he should know the ways and means he can utilize to teach his students without demeaning them, and at the same time teach information necessary for adult coping. He ought to know the kinds of reading information his adult students need to understand, and how that information differs from the needs of a fifth grade child. And more. Much more.

It seems reasonable that an effective education/work program must require that its teaching staff know what they must teach and have the skills and tools necessary to do the job. Certification is not a fool-proof means of assuring that objectives will be reached, but it's probably as good a means as we have at the present time.

But that's not all. A good program should have a strong and continuous in-service element. Much in-service is ineffective because it isn't planned in light of the program it is to serve. It has to relate to the people and the students being served.

In the summer of 1975, a certain group of adult educators received in-service to better prepare them to teach reading to functionally illiterate adults. The in-service trainer was selected from a reputable university with a good name in the area of reading. The in-service was abominable. The trainer knew nothing about adults, and spent her entire time discussing beginning reading programs and materials--for children. In-service can be highly effective, but it must fit the needs of the population being served.

Furthermore, in-service should be preceded by some sort of a needs assessment. The program director should try to find the areas where his staff needs to sharpen their skills. If he asks the staff to give him suggestions, most teachers will be willing to give the areas where they would like to have more work, although in some circumstances, teachers feel they may be downgraded if they admit to any lack of expertise.

If possible, it is better to have one good in-service instructor for several sessions than to have a different consultant each time. The consultant has a better opportunity to get to know the teachers and they can begin to gather their questions so they can ask him the next time he comes back.

An in-service consultant should spend a few hours observing and talking with the teachers before he makes a presentation. This will allow him to address himself more accurately to the needs of the program than if he is unfamiliar with the program.

Another valuable in-service training activity is the visitation of other successful program; where that is possible. Workshops and conferences sometimes can be inspirational, too. Even tapes and

presentations with filmstrips can be helpful if the staff member in charge prepares for them carefully in advance. Some excellent materials of this sort are available through the offices of Project ACT at Colorado State University in Fort Collins, Colorado.

Measurement and Evaluation

Evaluation implies goals, and each education/work program should have them. Program goals and goals for the individual students. Determination of whether or not goals have been reached need not always be in terms of formal measures, although some formal measures may fit nicely and be very effective. Informal measures and recorded observations can often tell more about the achievement of goals than standardized tests. A well-known management system widely used in reading instruction for children was recently evaluated, and the report showed that the children using the system knew more about word analysis skills than students who hadn't used the program. Standardized test results proved it. Informal measures and recorded observations, however, indicated that: (1) the students in the system didn't understand what they read as well as the other students; and (2) they didn't like to read nearly as well. A good program will use whatever evaluative processes are most effective, whether formal or informal.

Early reading and math placement is important for good progress in both those areas. A student placed too low or too high will often become discouraged and leave the program. Simple tools such as the Reading for Understanding Placement Test, the Test that's Not A Test for reading or the Math Placement Guide for math are among a number of instruments which can be used to find a correct reading or math placement levels for instruction. The Math Placement Guide also gives a quick estimate of math learning potential allowing the instructor to know in advance whether or not the student will need more repetitions and concrete examples in order to learn math concepts.

Diagnosis of reading and math difficulties is part of good instruction for the adult with special needs. Again, the Math Placement Guide gives a good indication of areas of difficulty in arithmetic, while an informal reading inventory and criterion referenced test seem to be the most effective in reading diagnosis. Criterion referenced tests are simply samples of the kind of reading behavior the teacher wants to test out. If the student, for example, appears to the teacher to be weak in the use of context clues, the teacher may select three examples of sentences at the student's reading level in which the student is to supply a missing word which can be identified from the context. If the student is unable to complete the task, the teacher has found an area needing instruction. If the student has no trouble with the task, the teacher may go on to the next area where the student appears to have a problem. The process is uncomplicated and flexible. It takes little time to create a criterion referenced test, and the results can tell the observant teacher a great deal.

There are several achievement measures of reading which are on the market for use with adults. The two which are best known at this time are undoubtedly the Test of Adult Basic Education published by California Test Bureau, and the Adult Basic Learning Examination published by Harcourt, Brace and Jovanovich. There are difficulties in working with either of these two tests, difficulties which relate to the problems in finding representative samples and establishing suitable norms. But either of the two tests will give a reasonably satisfactory measure of gain provided that the same test is used for both pre- and post-test administration.

Testing too soon after a student comes into a program with a reading problem often makes the student so nervous he doesn't do well. The results are often inaccurately low, and mistakes result in assumptions based on those results. Tests taken after the student has had more time to become adjusted to the program appear to be more accurate. Still, too much testing is not an earmark of a good adult education/work program.

Conclusion

An effective education/work program aims at meeting the basic skill needs of the participants, their life coping needs and doing this through effective use of materials, the learning environment, staff selection and training, and effective use of measurement and evaluation.

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APPENDIX F

"STATUS QUO VADIS"

James R. Cobb*

"Status Quo Vadis" concerns the scarcity myth and how it sets the course of contemporary society. It proports that the future success of lifelong learning is to be found in the removal of this myth through personal and group efforts assisted by information collection/storage/dissemination organizations and institutions. Included is an example of a future scenario concerning events and consequences should one assume that "there is enough to go around." A long appendix and short bibliography included.

Part I

Status qo vadis. With this indulging pun of latin origin we have an apt description of how we operate in our present condition combined with an appropriate future oriented question. Posed together they seem to characterize this decade of nerve shattered uncertainty in anticipation of an unknown future.

In sampling the vast amount of contemporary writings, each offering a present perspective and an analysis of trends, it occurred to me that the future apparently does not hold much hope or promise if many of these authors and computer programmers are correct. With the Club of Rome report group out of MIT, with the future shock (ing) Alvin Toffler, and with the many other futurists, one may justifiably be concerned, if not scared of tomorrow.

It has been several years since the ugly spector of the energy crisis loomed its head above the horizon. Almost daily, we read of our four billion plus world population and the food shortage that promises to worsen producing certain famine for many.

On the television we see and hear of muggings of senior citizens. Our eyes and ears are filled with news of coup d' etat, assassination, and violence.

All is woe.

Status quo vadis? Someone forgot to leave the instruction booklet for the running of our tiny globe. Without certainty we seem to be groping. Answers to our worsening problems only seem to create more and more complex problems. We are told that we are killing ourselves and that we may destroy our entire planet with our pollution and/or bombs. Some have gone so far as to suggest that man, the great Homo Sapiens, should be classified either as an endangered species or as a dangerous species.

In an attempt to unravel our present condition and to offer a sketch of what we may expect, I intend to use the opening pun. In dissecting it, one finds a reference to status, the status quo, and to the question quo vadis, or "whither are you going?" Each needs to be viewed in a present context.

Status. . . ."a position or rank in relation to others, a relative rank in a hierarchy of prestige." Today the idea of democracy seems to be less and less popular. It is being replaced by the call for a strong leader, a ruler, a totalitarian who will or can deal with our problems in an efficient way.

We have begun to feel that the burden of self governance is too great. We have found that the process of popular discussion producing a "collective wisdom" does not work in the day to day management of our affiars. We have found that people can be too easily swayed, if not manipulated, by the rich, the powerful, the images of the mass media. We have found our own desires insatiable for status and power, yet because of our incertaintude, we are willing to defer to authoritarians with answers. It would appear as though our image of the ideal is to be moneyed and irresponsible, sheltered and secure from the rising dissonance outside.

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Status quo. . . ."the existing state of affairs." From our personal lives to our governmental and business affairs, we tend to find greater acceptance and willingness to keep what is known. We seem to be losing our confidence in our institutions, our technologies, and in our willingness to experiment, innovate or recreate. An image of airplanes stacking-up in a holding pattern comes to mind. Rather than devising new flight schedules, building different airports or exploring alternative modes of travel, we continue to stack and hold until our time comes to land.

Quo vadis. . . where do we go from here? Before we begin to sketch our intended (and designed) future, I believe we need to question (to the assumptive level) our present mode of organization and operation. It seems to me that we have locked ourselves into notions about the world that were invented relatively recently. By this I mean that our current four billion plus inhabitants have forgotten the estimated 66 billion people the earth has supported who have lived before on this planet. I mean that we have opted for many ideas and systems which have their origins in the western Medieval period and were defined in the late 18th century and were further refined throughout the 19th century.

More specifically, I am referring to the worker organized by specialized skills, in hierarchies that lead eventually to the top decision maker so that the "apparently inherent scarcities" of the earth would be dealt with through cooperative efforts of greater production and more equitable distribution. It has been assumed that this pattern of organization is efficient, fair, and necessary. It has been assumed that since there isn't enough to go around (food, resources--both natural and man-reorganized, shelter, energy, jobs, etc.) we must scramble and work to live or we must become a welfare symbol admitted to the ranks of one who may share in the "take" on a limited but obviously odious basis.

From the feudal manor of kings and surfs, to the city of mayor, businessmen and worker citizen, to the nation-State of government, business and masses of labor-citizens, we have evolved our unique pattern of western organization over the centuries. "Evolved" is an appropriate 19th century word description for it implies a "Social Darwinism," a survival of the fittest attitude that we use as justification of our organizational behavior.

A contemporary of Charles Darwin was Thomas Malthus. You will recall that he suggested from his study of "world resources" while working for the great East Indian Trading Company that the population tends to increase more rapidly than the food supply. In other words, if we continue to geometrically reproduce ourselves unchecked by natural occurances and/or moral restrain (whatever that means) the arithmatically increasing food supply would be insufficient and poverty, starvation, and degradation of all mankind would result.

In contradiction to this type thinking, I believe we need to recall that. . . "from 1950 to 1973, the food supply of the world has been increasing at a faster rate than has world population. This is the result of the green revolution: the use of fertilizers, machinery, pesticides, irrigation, improved species of crops, in short scientific agriculture." (Cy A. Adler, Ecological Fantasies, New York, Delta, 1974, page 284.) And that "even at the end of this century, less than 3 percent of this nation's land will be devoted to urbanization. Over 95 percent will still be farmland or wilderness." (Adler, p. 260.)

From May of 1970 to the present, we have had an almost continual electronic diet of dooms-dayers and doom-sayers. Since our first "earthday" when we en masse learned the new words "ecology" and "biodegradable," our society has seemingly been on the downslide. As a population, we seemed to sense our environment was somewhat polluted, but now, since so many "Earthdayers" have told us how bad it is, we are worried, lost and in a state of despair: To use a big car, small car or mass transportation? To use a detergent or to use soap powder? To use colored and scented toilet paper or recycled crepe paper? To use coal and oil for generating electricity or hazard the nuclear age with atomic energy? The Arabs and our energy crisis! World inflation-deflation-stagflation! The whole Watergate thing! All woe. . .and status quo!

Part II

It is within this general context that I am addressing the question of what ought to be in lifelong learning. In my mind, two other ideas need to be alluded to before I begin sketching a design of future educational systems and curriculum. One idea concerns automation and the other idea regards modularization/specialization/seg-men-ta-tion.

It seems to me that too little attention has been given to automation as it relates to economic viability either as a participant citizen or as a society in general. We have heard that the average worker in England is now only half as productive as the average U.S. or German worker. (We tend to forget that many British workers are having to use 19th century tools in reconverted 18th century factory buildings. It seems obvious to me that his productivity should be down.)

We have heard that machines are replacing certain jobs in the assembly lines. Some have suggested that this creates unemployment and produces job insecurity. Even in educational management circles we now refer to "desks" meaning people and positions, and FTE's meaning students taking an assigned average academic load.

It appears that considerable retoolings is going on not only in the work place but also in our language as well. We tend to be automating our language and our world with little regard to the human consequences--all in the name of efficiency for the system(s) of production.

As an aside, it seems that today's student is asking more frequently than before questions concerning "what to be, and what to do upon finishing school." This implies to me that at long last the school system has become firmly welded to the business-work world and that many view schooling as terminal and a prerequisite for what is to follow--work for the rest of ones life.

Now, I know that adult lifelong learning is considered to be "the wave of the educational future" and I know that vast numbers of adults are retooling themselves in classes, educational courses and training programs. I also know that old jobs are being closed to human occupancy for a more efficient and less costly mechanized approach. (Machines move people!) From my own experience, I know some return to formalized instruction willingly, but I also know that many others are returning out of fear into a fearful environment of school.

Schools are modularized, courses are specialized and discretely organized (seg-men-tiz-ed). Schools are becoming the recycling plants of people in search of security.

Alvin Toffler in his opus Future Shock has an insightful series of chapters under the notion of transcience. Chapters headings include, "Things: The Throw Away Society," "Plans: The New Nomands," followed by the chapter entitled "People: The Modular Man." He points out that "from March of 1967 to March of 1968, that 36,000,000 Americans. . .changed their place of residence." (p. 78.) Further, he reports that "at Westinghouse, for example, it is believed that the so-called 'half-life' of a graduate engineer is only ten years--meaning that fully one half of what he has learned will be outdated within a decade. . .and that a recent survey of 450 American advertising men found that 70 percent had changed their jobs within the last two years." (p. 112.)

We certainly are a society on the move--not only in terms of geographic location, but also in terms of our filling a job or serving in a role. But the image of the fearful adult learner still comes to my mind. Automatic and systematic comes the adult for the refresher course, soon to be recycled through the system, newly trained, recertified and (hopefully) rejuvinated with whatever is required in the workplace.

It seems like we in education are serving in a reactive role to further aid the modularization/specialization/and seg-men-ta-tion of our society. And maybe this has been our traditional role since the formal (university) schooling process was an invention of the Medieval period. Maybe our role as educators has always been to organize and to fit people into the on-going system of tasks relating to other tasks; jobs relating to other jobs; organizing and (re)tooling people into leader/follower; manager/employee; thinker/doer dichotomous relationships.

My guess is that we knew what we were doing when we invented the school bell in the 19th century. We were producing the time clock worker for industry. My guess is that we knew what we were doing when we arranged the curriculum into areas of specialization. We were producing discretely skilled products for the factory. My guess is that we knew what we were doing when we applied the school bus to remedy social ills--we are making the first commuter generation of school children so that as adults they would feel comfortable on the move--continually on the move to their place of work for the social good.

Before I go much further, I need to digress a bit to tie a few things together in this apparent discontinuity. It is my position that today's adult learner is a person who is locked into an on-going set of interrelated structures. For the most part the adult learner of today is insecure of what she/he knows, and fearful of what she/he can do about the current entrapping state of affairs. All systems seem to feed into each other with disincentives-for-change built into each step of the way. In other words, we are locked into myth-taken arrangements that debilitate the individual for the preservation and perpetuation of the on-going present.

At the beginning I indicated that there was one initial assumption I wanted to question--that assumption being the scarcity notion of our society as it has us organized and operationalized into "modulars" who fit for a certified length of time then who opt for retooling, retraining, recertification and/or re-education for re-entry. Do we recycle or recreate is my question to you, the adult educator?

Part III

Television and time-binding? You may ask what do these have to do with adult learning, particularly as they relate to what ought to be considered in a lifelong learning process. I believe there is considerable import to both of these. First, television.

TV is an agglomeration of present perspectives and an incoherent discontinuity of today. Somehow we, as a society, are pop-culture bound as consumers of news, sports, entertainment, ideas, issues, "soaps," game shows and who knows what else. (See long appendix and short bibliography.) Television is the 20th century printing press. This image, I use, most seriously. As in the Medieval Period few could read--(well, there was limited access to the few extent books, but also, the power structure admitted only a safe few into the inner sanctums of reading.) Along came Gutenberg with his invention and soon many could read, critically I might mention, and seemingly over night there were insurrections, reformations, counter reformations and revolutions--the threads of the power structure have been unravelling ever since. Actually, the old power structure has just decentralized and expanded a bit. We still are working through this invention. (Anyone for an Adult Right to Read Program?)

But lo--before we can all read, before we are through our reconstructive phase as a result of the printing press, along comes television. I would suggest that despite the viewerships, few of us yet know how to watch and listen, to apprehend and comprehend the images and sounds that fill our private rooms and thoughts. I am fairly certain, however, that we have just begun to feel the consequences--and our initial response is the one of conditioned fear of the unknown that is beginning to be known.

Authority structures are leaking information into our complacent sheltered lives. And all of this is rather disturbing for we are finding that this is a very small globe with a vast array of interconnecting systems, networks, patterns, needs and behaviors. Seemingly all at once, we are beginning to know how similar, yet how distinctively different we all are. . .how independent yet how interdependent we all have become. . .how completely stable, yet how abundant but fragile our institutions, our organizating production/distribution systems are. Our tiny earth can be a success--if we want to make it so. The decision is ours.

Now-Senator S. I. Hayakawa in his classic Symbol, Status, and Personality (Harcourt, Brace and World, New York, 1963) offers a most important concept from the discipline of general semantics. Time-binding is the concept. It involves the tying together over time and space humans in the flow we call civilization, society-building, institutional social organizing. Of this concept Hayakawa writes "All human cultures are the product of time-bindings--of communication from the past to the present. . . the definition of man as time-binder is similar to the anthropologists definition of man as culture-bearer in that both definitions place emphasis on the fact that men are social products. . . the two definitions differ however, in that the former accepts progress as a measure of successful time-binding. Time-binding implies that when a culture is functioning well its resources become richer as time goes on: knowledge increases, technology improves, literacy and artistic resources become more abundant." (pp. 172, 173.)

To perceive what I was referring to when I likened the television to the printing press, one need only consider this single concept of time-binding to begin a valuable search. If one wanted to be biasedly optimistic, one would suggest that the TV viewer is time-bound to the contemporary news and world current events through documentaries, special broadcasts, etc. Various PBS presentations, and to a degree commercial network programming bind the viewer into a world rich in content concerning

both visions of the present and revisions of the recent past. However, if one wanted to be biasedly pessimistic, one would suggest that the TV viewer is bound more to fluff and inanities and generally committed to escapist type programming in the world of sports, "soaps," serials, and "sit-coms." The Federal Communications Commissioner, Newton Minnow (years ago, you will recall) referred to television as that "vast wasteland" when he decried the programming and vast missed potential of the electronic media. Some would suggest that Minnow's judgment has neither been heard nor heeded and that TV is worse and more of a waste than ever. These critics suggest that there is definitely no scarcity in poor programming.

However, let us close in a bit on the topic at hand--education. Have you considered at length the programming (we call it curriculum) that goes on from our studio (we call them schools). Let's assume that Alvin Toffler is correct when he writes that "what passes for education today, even in our 'best' schools and colleges, is a hopeless anachronism. Parents look to education to fit their children for life in the future. Teachers warn that lack of an education will cripple a child's chances in the world of tomorrow. . .yet for all this rhetoric about the future, our schools face backward toward a dying system, rather than forward to the emerging new society. Their vast energies are applied to cranking out Industrial Men--people tooled for survival in a system that will be dead before we are." (Future Shock, Bantam Book, New York, 1971, pp. 398-399.)

Like so many other critics of our educational system, Toffler points out that societies create their educational structures to address unique needs, to preserve and perpetuate distinct values, to bring-up the young in the ways of the wise. In fairly stable and past-bound societies, children followed the parent for the necessary skills and knowledge resided in them. However, in our culture, the mechanical age has altered everything.

Education and schooling as we know them today, are fairly recent inventions. It was in response to the 19th century industrial demands that we evolved the present system of education. As both overt and covert constructions, curriculum content, delivery and designs all have meanings and consequences whether or not we wish to acknowledge their existence. We turn to Toffler again and read that "the problem was inordinately complex. How to pre-adapt children for a new world--a world of repetitive indoor toil, smoke, noise, machines, crowded living conditions, collective discipline, a world in which time was to be regulated not by the cycle of sun and moon, but by factory whistle and the clock.

"The solution was an educational system that, in its very structure, simulated this new world. . . the whole idea of assembling names of students (raw material) to be processed by teachers (workers) in a centrally located school (factory) was a stroke of industrial genius. The whole administrative hierarchy. . .followed the model of industrial bureaucracy. The very organization of knowledge into permanent disciplines was grounded on industrial assumptions." (Future Shock, p. 400.)

As adult educators, we probably are sensitive to the fact that American public education, even when it is vehemently criticized and attacked, survives and flourishes because it alone is so all pervasively powerful and successful. It alone feeds in the new product-worker and feeds with the system in its symbiotic mutualistic relationship with government, business, and industry. And if this is the case (and I believe that it is), the question Status quo vadis returns to haunt when considering what ought to be included in the reform (if not new forms) of education.

Part IV

Scenario writing is a technique used by many futurists who attempt to get alternative futures examined, a reform agendum established, or some forethought sketch of contingencies which the future may be/can be/or need not become. Scenarios may take many forms; however, a style frequently used would be a reconstruction of events leading to some future condition. For example, let's say the concept of lifelong learning really catches on and it becomes an-on-going educational pattern for most (if not all) of our population. A scenario of events leading to its institutionalization and possible consequences might read: The date is October 2020 ad. Lifelong learning fills 45% "Huper" (a neutral non-sexist clip for Human Person replacing the word "mankind") leisure and work activities like only worktime did back in the 1950's and 70's of the past century. There were some difficult times, however. Take for example, the time when over 60 percent of all U.S. public school teachers went out on strike (even in Atlanta, Americus, and Plains simultaneously.) They protested the congressional resolution and subsequent court decision branding compulsory school attendance as oftentimes violating civil rights and "being cruel and unusual punishment" for a minority population--children!

Oh yes, those "Enlightened Eighties" were really something. First social/racial busings went by the wayside, then it was only a matter of time before the same type court case was built on the old (but newly applied) U.S. Constitution. Children had to have equal protection under the law: their civil liberties were being violated by the old work protective labor lobbied legislation that led to manditory school attendance laws, some hundred-or-so years ago.

It seemed like almost overnight that time honored tradition of public schools disappeared. You know, those school district bond issues that time and time again went to defeat took their toll, too. As I recall, near the end of the 70's, a superintendent had a half-life in a major U.S. school district of just over a year. "Superintendent Musical Chairs" were a constant newspaper headline.

And I recall Albert Shanker, that AFT fellow, who tried to lead his labor force of teachers back into education by personal example. He encouraged them to acquire new skills, new talents to be able to organize new concepts and content. I remember that day in June 1990 when he appeared on a New York TV news program with Ravi Shankir, sitar in hand--can you imagine Shanker and Shankir: Teaching the Sitar. Time/Life picked-up the series, ran it on TV, and City College offered CEU's for adult "hupers" and high school credit to those under eighteen years of age. New York City alone had an estimated 360,000 sitar players in that summer of 1991. A real media event happened when sitar players came out and played the "Star Spangled Banner" at Yankee Stadium. . .Albert Shanker was the new folk hero, a Woody Guthrie of the teacher band. Continuous lifelong learning was assured. Teachers went out to learn and teach. Schools were humanized into learner centers. Children were issued "learner chits" (they were called educational vouchers until the Disney group opened up the Midlands Educational Disneyworld south of the Crown Center in Kansas City and started Mickey Mouse teaching. The story has it that he called the kids one day his "Chitmonks" and the name stuck.) At any rate, everyone wanted in on the chit movement. GM workers settled without a strike for a worker invention/suggestion equation being awarded in educational chits, automation, and leisure time instead of a corporate shares and dollar bonuses.

There was a university out in Colorado which turned its computer into an ideas bank for its off-campus student-depositors. The system that developed allowed computer time (for a few chits) to run a computer search to patch programs for ideas, tools, and inventions. The university found it didn't need to track people so much as it needed to track ideas. Financially, it was a success and educationally it was fantastic. You know that university has its core subscription in over 27 percent of the U.S. computer terminals. In fact it is the largest ideas Bank College in the world.

Part V

Such a future scenario may be possible, if we plan it to be. Our strategy to make manifest a popular lifelong learning program throughout the United Stated may include the reduction (or even elimination) of the manditory school attendance laws. It may void the notion of degrees and terminal certification. It may involve some fairly obvious economic reappraisals and social restructuring. It may also call for some fairly bazaar media events to capture the national attention and redirect it to education.

As one individual, it would be presumtive on my part to assume specifically what programs and structures ought to be designed by our society for the future in adult education. Rather, I believe it is more important to develop ideas concerning process and to propose a general agenda for future discussions among educators.

As I implicitly indicated at the beginning, lifelong learning should be participatory with a very broad and as democratic a basis as possible. I would explicitly suggest, though, that before we go too much further into the future, we address the scarcity notion more completely. I believe that if we devote sufficient time to this one area alone with our present students, that information sharing will provide untold rewards in terms of building-up personal confidence leading to greater learning and enlightenment.

Rational designing of the lifelong learning systems should be one of our first priorities nationwide. To achieve this, I believe we will need to plan for success, with success, through information collection and dissemination aimed at, initially, the elimination of the finding scarcity notion. By removing myths, we can help people move themselves.

The thrust of lifelong learning in the future should be regenerative and synergistic. It should be both economically and ecologically oriented. Armed with tools of problem-solving, using knowledge (re)organization skills, we and our fellow learners can task-force, and future-invention-free ourselves through anticipatory design strategies. For example, an ad hoc task force may form and tackle a problem of one of its members to attempt to solve some factory related problem. It may organize for reaping financial rewards when successful as a group. It may bargain for greater access to information systems within the industry or it may opt for more "r and D" time-off or it may opt for industry-wide adoption/adaption of the invention/idea. What is important here is that lifelong learning should encompass a broad array of patterns--each being regenerative and associative and accessible as a potential model.

Much has been written in the past about the "teacher as facilitator" model. What may be said of the teacher could be even more applicable for educational institutions. For example, what would happen if major university computers were turned over to information collection/storage/dissemination instead of being used to track financial collections, compute, store and/or retrieve student grades. What would happen if access to information were encouraged by those entrusted to collect and store it--be the institution, education, governmental, or even industrial. What would happen if we had equal access to cable or mass media?

Here again, once we learn that scarcity is a "myth of contrivance," there will be few reasons for privacy--particularly in the production/distribution sectors. Rather, there will be a scramble to transform the worker into a regenerative/recycling creative consumer.

The future of lifelong learning must be rationally designed. As the "present guardians of knowledge" (and as professionals we'll sell you some for a fee), we teachers ought to consider opening-up our ranks and reconstructing our society by reforming from within. We ought to be less exploitive; rather, we need to be more sensitive to contemporary "huper" needs. Current updated information continually indicates Malthus to be a 19th century reactionary. We must be rational about our problem solvings, however. Let's participate in letting this secret out. Let's bind with others and gain the confidence by anticipating the future together. Let's join in the designing and constructing of the instruction booklet for guaranteeing the success of all "Huper" on this tiny globe.

My question to you as an adult learner is Status Quo Vadis?

A LONG APPENDIX

(For a fuller use of this appendix, it is suggested that you familiarize yourself with the following ideas and data. They may be useful in lifelong learning situations or of more immediate importance, in unconventional/convention(al) cocktail parties when the conversation needs a transition, a shift, or refreshing thought. The following provide outside references for many of the thoughts contained in "Status Quo Vadis"--only they are in a compressed fashion for the person who didn't have the time or energy to finish reading the article or who found the article incomprehensible.)

Idea: Lifelong learning needs to be oriented toward real problem solving. A quote from R. Buckminster Fuller: "The minute you were not concerned with earning a living and really tackled problem after problem that the other fellow was not tackling, there proved to be a wealth of solvable problems. In fact, the whole mass of problems that are worth tackling is so great that any average individual who goes into that kind of a paradise wilderness garden ought to make very good progress. . . I walked into a vast, unattended, potential harvest." (Ideas and Integrity. New York: The Macmillan Company, 1970, p. 62.)

Idea: A potential harvest for anyone (including the worker) may be found. "Pollution control will cost more than $200 billion using available technology. Spread over 10 years, $200 billion is a small fraction of the U.S. gross national product, and is a minor percentage of the monies the federal government is likely to waste on non-productive expenditures." (Cy Adler, Ecological Fantasies, p. 312.)

Idea: A possible "camp" call for reform and a further amplification of the above quote: "In a bureaucratic situation such as big business or big military, there is no morality, there is just behaviorism. Everybody steals and cheats the bureaucracy: the bureaucracy predicts this and writes it off before hand as expected 'leakage' " (Charles Jencks, Modern Movements in Architecture, Garden City, New York Doubleday, 1973, p 202.)

Main Idea: "This young world is about to take over, to help us design ourselves to make man a success on earth. If this is successfully done, the Malthusian and Darwinian frustrations will have no mandate to build weapons. To get rid of weapons we must design our way to positive effectiveness, and not just be negative about politicians and what they are doing " (Bucky Fuller, Ideas and Integrities, last page)

Random cocktail quotes for the (un)conventional:

1. "As of January 1974 New York City was generating a total of 33,000 tons of refuse per day--more solid waste than London, Tokyo and Paris combined-why " (Adler, p 292)

2. "In Holland, 13 million people live on approximately 13 thousand square miles, a density of 1,000 persons per square mile. Life expectancy in Holland is 74 years at birth; the literacy rate is over 99 percent. 'God made the world, but the Dutch made Holland.' The rest of the world has much to learn from the way the Hollanders use their environment " (Adler, p. 282))

3. ". . .residents of New York City on the average use approximately half as much fuel and power as comparative U.S. suburban residents " (p. 220) 40 percent of the nation's electrical energy is consumed by industry, 18 percent by commericial enterprise, 12 percent by transmission line losses and small consumers and only 25 percent by residential users." (Adler, p. 273)

4. Of the Alaskan Pipeline going from Pardhoe Bay to the Port of Valdez, "How much wilderness will the pipeline and all its auxiliary equipment occupy? How much cold wasteland is involved? Less than 15 square miles out of Alaska's 586,412 square miles." (Adler, p. 212)

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APPENDIX G

PARTICIPANT'S EVALUATION FORM AND RESPONSES

CONFERENCE EVALUATION

Part A

The following information was requested of all participants. Each individual indicated to what extent the conference met his/her needs by utilizing the following response scale:

Not at all		Adequate		Extremely Well
1	2	3	4	5

The participants' responses to the following statements are reported as a mean score.

Statements	Mean
1. Pre-Conference Information	3.94
2 Registration Procedure	4.67
3. Accommodations	4.19
4. Meeting Facilities	4.22
5. Conference Format	4.43
6. Special Arrangements for Breakfasts/Luncheons	3.24

After each of the above statements, space was provided for additional comments. These written responses appear below.

Pros

- Well planned, organized, and conducted
- Excellent conference format
- facilities met the needs

Cons

- Food poor, lodging average
- Buzz sessions were redundant
- Postsecondary administration were late passing registration information on to teachers and coordinators.

Part B

Participants were asked to indicate to what extent the conference succeeded in accomplishing specific points/factors by utilizing the following response scale:

Not at all	Somewhat	Adequately	Extremely Well
1	2	3	4

The statements and mean score for each appear below.

Statements	Mean
1. The conference has acquainted me with the organization, administration, and financing patterns of Postsecondary Education/Work Programs in Colorado	3.28
2. The conference has provided an information base to improve, expand, or install Postsecondary Education/Work Programs in Colorado.	3.26
3. The Conference provided a forum designed to delineate a set of problem areas and related needs for improving, expanding, or installing Postsecondary Education/Work Programs.	3.53
4. The conference provided a set of working definitions which facilitated communications.	3 30
5. The conference provided opportunity for a variety of perceptions to be shared.	3.76
6. The conference provided participants an opportunity to meet state leaders and national leaders.	3.59
7. The conference provided participants an opportunity to become aware of the new federal legislation	3.32

Part C

Each participant was asked to respond to four evaluative statements by placing the most appropriate evaluative remark (code number) in a matrix cell for each of the conference sessions. The responses appear as a "mean" score on the following page.

Evaluative Statements	Evaluative Remarks	MATRIX CELLS Session Number and Title Tues. a.m. Session I Educ/ Work in Colorado	Tues. p.m. Session I, Task Groups Caucus	Tues. p.m. Session I, Forum	Tues. Eve. Conference Paper Ms. Anita Salazar	Wed. a.m. Task Groups Caucus Session II	Wed. a.m. Task Group Leaders Reports/Discussion Session II	Wed. p.m. Dr. Pierce Session II	Thurs. a.m. Symposium of State Leaders Session III	Thurs. p.m. Panel Session III	Fri. a.m. Dr. Gary Hinrichs Session IV	Fri. a.m. Mr. Raymond Wasil Session IV
A. The information presented will be ? useful to me.	1 not at all 2 3 adequate 4 5 extremely	3.75	3.93	3.76	4.09	3.67	3.66	4.15	4.21	4.11	3.34	3.00
B. The time spent on this session was ?.	1 too short 2 3 just right 4 5 too long	3.00	2.79	2.74	3.14	2.78	3.02	2.82	2.88	3.00	3.14	3.17
C. The level at which the information was covered was ?.	1 too specific 2 3 just right 4 5 too general	3.25	3.16	3.27	3.09	3.22	3.22	3.17	3.20	3.04	3.29	3.05
D. The organization of the information was ? well done.	1 not at all 2 3 adequately 4 5 extremely	3.93	3.90	3.69	4.49	3.31	3.58	4.15	4.04	3.80	3.75	4.30

Part D

Each participant was asked the following question:

"If a similar conference were held, what would you recommend for its length?"

The mean was 3.62 days.

Each participant was asked to respond to the following question:

If you were planning a similar conference, what alternative conference techniques and structure would you recommend?

The responses are synthesized below:

1. More task force meetings with members rotating.
2. Separate evaluations for each speaker.
3. Follow-up with a planning conference and include more representatives from business and industry.
4. Provide for more interaction with key presenters.
5. Keep the same structure for the conference.

Each participant was asked the following question:

What commitments will you make for either improving, expanding, or installing programs of Education/Work in your institution following this conference?

Their responses are synthesized below:

1. Administrators promised to support the education/work concept by organizing local efforts as well as improving vertical lines of communications within their institutions.
2. Individual teachers would return to their institutions and seek ways of initiating new programs in both the academic as well as the vocational education areas.
3. Some individuals would seek better coordination and collaboration between programs and institutions.
4. Some individuals plan to improve their relationship with the business/industry and labor sectors of the community.
5. Greater emphasis on adult needs and related education/work programs were stressed by a few individuals.
6. Others expressed their support of on-going programs and better articulation with secondary and higher education programs that have cooperative education endeavors.